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Kendall
& Whitney

SEEDS



PORTLAND
MAINE

IMPORTANT TO CUSTOMERS

ORDER EARLY.—We would suggest that customers send us their orders as soon as possible after receiving this catalog, and thus avoid the rush of the planting season. It frequently happens that some articles are not in store when orders are received. In such cases we forward such as are ready, and the balance as soon as possible.

STOCK SEED.—A large part of our seeds are grown for us on contract by special growers, from our own stock, and in locations best suited for their development. Others are secured from strictly reliable sources, and constant effort is made to secure only the best.

ADDRESS, ETC.—Give name of your **post office, county and state**, sign your name plainly; also specify means of conveyance preferred—whether by parcel post, express or freight.

FREE DELIVERY.—We will send by parcel post, to any part of the United States, all Vegetable and Flower Seeds quoted in this catalog at packet, ounce, quarter-pound and half-pound rates, free of expense to the purchaser, excepting heavy seeds such as Peas, Beans, Corn, Clover Seed, Seed Grain, Roots, etc. These are quoted at net prices at our store. Purchasers desiring these by mail are requested to remit an additional amount sufficient to cover postage, at parcel post rates according to zone. Allow two pounds in weight for each quart of Peas, Beans or Corn. Particular attention is invited to this, as, when omitted, the cost of postage will be deducted from the amount received.

SHIPPING.—We deliver free to Express, Railroad or Boat. All goods travel at the buyer's risk; our responsibility ceases when we take the carrier's receipt. If goods are damaged so sign for them and enter claim with the carrier **at once**.

BAGS.—On orders for seed requiring bags the cloth bags are charged for at cost and if returned in good condition, charges prepaid, will be credited at price charged on all except wholesale orders.

REMITTANCES.—May be made by Express Money Order, Post Office Money Order or Bank Draft; if stamps or cash send in a Registered Letter. Parties having no account with us—who order goods without remittance—must furnish satisfactory references. Portland references preferred.

PRICES.—All prices are net without discount and **subject to change without notice**.

PARCEL POST RATES

Packages must not exceed 84 inches in length and girth combined. 70 pounds is the limit of weight in the first, second and third zones. 50 pounds is the limit of weight in all other zones.

1st zone—5c. for first pound and 1c. for each additional pound or fraction. 5th zone—8c. for first pound and 6c. for each additional pound or fraction.

2nd zone—5c. for first pound and 1c. for each additional pound or fraction. 6th zone—9c. for first pound and 8c. for each additional pound or fraction.

3rd zone—6c. for first pound and 2c. for each additional pound or fraction. 7th zone—11c. for first pound and 10c. for each additional pound or fraction.

4th zone—7c. for first pound and 4c. for each additional pound or fraction. 8th zone—12c. for first pound and 12c. for each additional pound or fraction.

Postage on seeds, bulbs, plants and roots of 8 ounces or less, to all zones, is 1c. for each two ounces.

Postage on general merchandise of 4 ounces or less, to all zones, is 1c. an ounce.

N. B. War Stamp Tax. Add 1c. for each 25c. or fraction thereof charged for postage.

ALL CORRESPONDENCE ANSWERED PROMPTLY

Telephone Orders Given Immediate Attention. Call Portland 3953

While we exercise the greatest care to have all Stocks the best and most reliable, we do not give, and our employees are forbidden to give, any warranty, express or implied, as to description, quality, productiveness, or any other matter of any Seeds, Bulbs or Plants that we send out, and we will be in no way responsible for the crop. If the purchaser does not accept the goods on these terms, they must at once be returned.—K. & W.

KENDALL & WHITNEY

BRIEF HINTS

ON THE SOWING AND CULTIVATION OF

FLOWER AND VEGETABLE SEEDS

The Soil and Its Preparation

THE best soil for nearly every purpose is a light, rich loam. Where the soil is too light, a thin layer of clay, if to be had, should be spread over the surface in the autumn, and dug in—after being pulverized by the winter frosts—in the spring. This, with the use of old manure, will keep the garden in good condition. Deep and thorough trenching in the autumn, if possible, and the application of very old or decayed manure or leaf mold will give a well-prepared and suitable soil.

Period for Sowing

This must depend much upon the season as well as the locality. As a general rule for New England, the proper time to commence sowing is about the last of April, though a few sorts may be planted as soon as the ground can be made ready; and for a succession the sowing should be continued until June. To avoid all danger of injury, the sowing may be deferred, but when a little labor is of no consideration the sowing may be made earlier, and, in case of failure or injury from frost or wet, another sowing may be made when the weather is more favorable.

It is the great error to cover too deeply, and the cause of more than half of the complaints against seedmen of selling old and worthless seeds comes from inexperience and want of judgment in sowing. There are many contingencies to meet in getting a crop, and frequently the best seed of the strongest vitality will not come up, on account of some unknown or unfavorable climatic conditions, but all our seeds are thoroughly tested and inspected, both for vitality and for purity, and we never knowingly send out seeds which will not grow or that are not in every way superior.

There are several aids to the economical management of the garden which are almost indispensable; one of these is the *hotbed* frame for the forwarding of plants for early planting—a frame made of various sizes, according to the size of the garden, from four sashes upward. The length of sash is generally six feet by three wide, the size of glass six by eight inches. The frame should have a southern or southeastern exposure; should be made up of fresh horse manure, and a few leaves mixed with it; this must be laid in a heap preparatory to being used, and when in a proper state of fermentation prepared for the reception of the frame. A few inches of rich, loamy soil must be spread over the manure; then cover the frame with the sashes, and after standing a few days, to allow the rank heat and steam to pass off, the seed can be sown. Where the ground is well drained, a better plan is to dig out a space the size of the frame, one or two feet deep, according to the season and the heat required, in which the manure is placed, care being taken to pack firmly and evenly.

Grow Your Own Vegetables

Probably most of our readers have a garden, perhaps only a flower garden, but there must be many who have never known the pleasure derived from planting a vegetable garden. If you have never known the delight of growing your own vegetables and of taking them fresh and cool from the garden to the kitchen, you should begin this year. Write us as soon as you receive our catalog.—K. & W.

∴ SPECIAL OFFERS ∴

SEEDS IN PACKETS OR OUNCES ONLY

The following may be selected from our catalog, at the prices named, and will be forwarded, postage free, to any part of the United States:

Purchasers remitting \$1.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of 25 cents.

Purchasers remitting \$2.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of 50 cents.

Purchasers remitting \$3.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$1.00.

Purchasers remitting \$4.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$1.50.

Purchasers remitting \$5.00 for seeds (in PACKETS OR OUNCES) may select additional seeds in packages or ounces to the amount of \$2.00.

☞ Seeds when ordered in LARGER PACKAGES than the above (as quarts or pounds) WILL NOT BE INCLUDED, NOR PLANTS OR BULBS.

SPECIAL \$1.00 OFFER

CONSISTING OF

30 5c.-Pkts., or 15 10c.-Pkts.

Packages may be selected by the purchaser from any varieties (both flower and vegetable seeds) found in our catalog, and same will be sent by mail, on receipt of price (ounce packages NOT included).

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☞ The extraordinary conditions of the past few years still prevail, and the continued unsettled state of affairs makes it almost impossible to publish a catalog with prices acceptable for any length of time. While we are holden to all our friends and customers to make the very best prices possible, yet we must reserve the right to increase these prices over the ones here printed should the times make it necessary, but we will be glad to REDUCE them should future conditions give us that privilege.

A DESCRIPTIVE LIST OF FLOWER SEEDS.

General Directions for Cultivation.

A rich, sandy loam is best for most flowering plants.

It is best, except in the case of hardy annuals, to start the seeds in shallow boxes in the house and prick out and reset into another box so that the plants may be of good size and strong when ready to set in the garden.

When planted directly in the garden the soil should be fertilized and made very fine before sowing, and the plants afterward thinned out, or transplanted to stand from two to twelve inches apart according to the variety. Do not cover too deeply. As a general rule, for the larger seeds cover from one-fourth to one-half inch, and for the very fine seeds merely press them into the soil with a piece of board. After sowing seeds press the earth firmly over them to prevent their drying up. If the weather is dry water frequently with a fine spray.

Flower Seeds Sent Free by Mail on Receipt of Price.

ANNUALS.

These are plants which bloom the first season from seed, and are the most generally grown of all flowering plants. There is no place in the garden where some of them will not grow, and their bright colors are the source of continued enjoyment.

A list of the perennials will be found on pages 14-15.



ABRONIA UMBELLATA.

ABRONIA UMBELLATA.

Per Pkt.

Handsome, trailing annuals, with clusters of sweet-scented flowers resembling the verberna. Fine for baskets or for the garden. Blooms from August until October

5

ACROLINIUM.

An elegant, half-hardy annual, producing beautiful everlasting flowers. Grows about one foot high.

MIXED 5

ADONIS.

A hardy annual, with very pretty foliage, producing bright red flowers. Grows about one foot high and blooms for a long time..... 5

AGERATUM.

Half-hardy, free-flowering annuals, blooming throughout the season. Fine for beds or borders.

FINE MIXED. 1 ft..... 5

IMPERIAL DWARF BLUE. 8 in. 5

PERFECTION DARK BLUE. 1 ft. 5



AGERATUM.

ALYSSUM.

A hardy annual, about eight inches high, with clusters of small, fragrant flowers. Fine for bedding and bouquets.

SWEET. White; 1 ft..... 5

TOM THUMB. Very dwarf; white..... 5



ALYSSUM.

ANTIRRHINIUM. (Snap Dragon.)

Giant Varieties.

Per Pkt.

A very showy and half-hardy perennial (used mostly, however, as an annual), about three feet high, flowering well the first season. Sow the seeds early, in pots or under glass. An improvement over the old variety, producing longer spikes and larger flowers.

ROSE 5

SCARLET. 5

SCARLET. White throat. 5

WHITE 5

YELLOW 5

YELLOW AND SCARLET.. 5

MIXED 5



ANTIRRHINIUM.

AMARANTUS.

Half-hardy annuals, about two feet high, with finely variegated foliage. They are most brilliant on poor soil and in dry seasons.

TRICOLOR 5

AMMOBIUM ALATUM.

A useful everlasting for making dried winter bouquets and a showy border plant, growing freely in any garden soil. Hardy annual.

WHITE. 2 ft..... 5

ANAGALLIS.

Beautiful, trailing, hardy annuals, about six inches high and very desirable for small beds, edgings, baskets, etc.

MIXED 5

ASPERULA.

A most profuse-blooming, hardy annual, attaining an average growth of one foot, the flowers of which are a beautiful light blue, are very sweet scented, and last a long while in perfection. 1 ft. 5

ASTER.

Very beautiful and popular half-hardy annuals, growing from ten to eighteen inches high. For profusion of flowers and richness of display, the asters are unrivalled. Sow the seed early in the spring, under glass or in pots in the house, and transplant into rich soil, about one foot apart.

ASTER—Continued. DWARF VARIETIES.



QUILLED ASTER.

DWARF CHRYSANTHEMUM FLOWERED. A free bloomer, with large flowers; mixed; 1 ft. 10

TRIUMPH. Deep scarlet, a rich, brilliant color. Each plant bears thirty to forty flowers of great beauty; 8 in. 10

SEMI-DWARF VARIETIES.

COMET. A variety of great beauty. Grows in pyramidal form thirteen to fifteen inches high, covered with large double flowers with long curled petals. Choicest mixed varieties 10

CARTER'S WHITE PLUME. One of the most magnificent white asters yet produced; height about fifteen inches. 10

BETTERIDGE QUILLED. Perfectly double quilled flowers of beautiful mixed colors 5

BLUSH QUEEN. Large flowers of a delicate blush color, and borne in great profusion 10

QUEEN OF THE MARKET. Finest mixed; very early 10

VICTORIA. Very large, of perfectly double form.

WHITE 10

MIXED 10

TALL VARIETIES.

COCARDEAU OR CROWN. The flowers of this variety have large white centers bordered with scarlet, carmine, violet or blue; attractive and beautiful; 2 ft. 10

CREGO. The finest of all comet asters, having immense flowers resembling chrysanthemums.

LAVENDER 10

PINK 10

WHITE 10

MIXED 10

TRUFFAUT'S PEONY-FLOWERED PERFECTION.

A beautiful early flowering variety. The flower is densely double, and the petals so symmetrically incurved as to resemble a perfect ball. Mixed colors; 2 ft. 10



10 PEONY-FLOWERED PERFECTION ASTER

OSTRICH FEATHER. Very large bloom, with long, fringe-like petals, similar in shape to Japanese chrysanthemum. 10

SEMPLE'S BRANCHING. A superior and free-flowering class. The flowers are large, with graceful, wavy petals on long stems; excellent for cutting; 2 ft.

LAVENDER 10

PINK 10

CRIMSON 10

WHITE 10

PURPLE 10

FINEST MIXED. All colors 10

CHINESE. Common variety; mixed 5

BACHELOR'S BUTTON.

Per Pkt.

A showy, hardy annual, about two feet high, succeeding well in any soil. Set six inches apart.

FINEST MIXED 5

DEEP BRIGHT BLUE 5

DOUBLE BLUE 10



BACHELOR'S BUTTON.

BALSAM.

Most magnificent, popular, half-hardy annuals, from one and one-half to two feet in height. Sow the seeds early in frames, and transplant to a well enriched border one foot apart.

FINE DOUBLE. Mixed 5

ROSE-FLOWERED 5

CAMELIA-FLOWERED. Finest mixed 5



DOUBLE BALSAM.

BEANS. (Flowering.)

Valuable for use on trellises and arbors, being highly ornamental and free climbers; plants are of strong, quick growth, bearing large sprays of handsome flowers.

SCARLET RUNNER. Very ornamental, bright scarlet flowers 10

WHITE RUNNER. Similar to above, flowers being white.... 10

BRACHYCOME IBERIDIFOLIA. (Swan River Daisy.)

Very pretty, free-flowering, dwarf-growing annual; well adapted to edgings, rustic baskets, or pot culture.

MIXED BLUE AND WHITE. ½ ft. 5



SWAN RIVER DAISY.

BROWALLIA.

Handsome, profuse-blooming annual, covered with beautiful flowers during the summer and autumn months.

ELATA COERULEA. Blue; 1½ ft. 5

ALBA. White; 1½ ft. 5

FINE MIXED 5

CALENDULA.

Free-flowering, hardy annual, growing in any good garden soil, producing a fine effect in beds or mixed borders. 1 to 1½ ft.

METEOR. Double; yellow striped orange 5

PRINCE OF ORANGE. Double; dark orange 5

FINEST DOUBLE MIXED 5



CALENDULA.



CALCEOLARIA.

CALCEOLARIA.

Per Pkt.

Indispensable for the greenhouse or the flower garden. They succeed in any light, rich soil. Half-hardy perennials.

CHOICE MIXED VARIETIES.... 25

CANDYTUFT.

A well-known, hardy annual, very useful for bedding and bouquets, and also for pot culture.

EMPRESS. Large trusses of pure white flowers; very handsome. Used for forcing. Ounce 40c.. 5

LITTLE PRINCE. Large heads of pure white flowers. Plants about six inches high. Ounce 40c. 5

CRIMSON. Ounce 25c..... 5

PURPLE. Ounce 25c..... 5

WHITE. Ounce 25c..... 5

FINEST MIXED. Ounce 25c..... 5

ROCKET. Pure white, long spikes. Ounce 25c..... 5



CANDYTUFT.

CANARY BIRD FLOWER.

A rapid-growing, delicate climber, reaching a height of from ten to fifteen feet. Bright yellow, fringed; exceedingly beautiful foliage. Half-hardy annual..... 5

CANNA.

Handsome foliage plants, growing from three to eight feet high. Highly ornamental on the lawn. Soak the seed in warm water for about twelve hours. Seeds should be sown early in a strong, moist heat.

CANARY BIRD FLOWER. FINEST MIXED..... 5

CATCHFLY.

A hardy annual, about one foot high; produces brilliant flowers in great profusion in early summer.

MIXED 5

CENTAUREA.

Silver-leaved plants, fine for ribbon borders, baskets, etc.

CANDIDISSIMA. Thick foliage; $\frac{3}{4}$ ft. 10

GYMNOCARPA. Graceful white foliage; $\frac{3}{4}$ ft. 10

CINERARIA.

Well-known favorite, free-flowering plants for the greenhouse, which may be had in splendid bloom through the greater portion of the year, and from the richness and diversity of the colors are among the most valuable of our early spring flowers; succeed best in light, rich, free and open soil. Greenhouse perennial.

CARTER'S BRILLIANT PRIZE. Choicest varieties 25

FINE MIXED VARIETIES 25

CHRYSANTHEMUMS.

ANNUAL.

Per Pkt.

The annual chrysanthemums are free-blooming, easily grown plants. They have large, daisy-like flowers in a variety of brilliant colors and are fine for cutting.

DOUBLE WHITE 5

DOUBLE YELLOW..... 5

DOUBLE MIXED 5

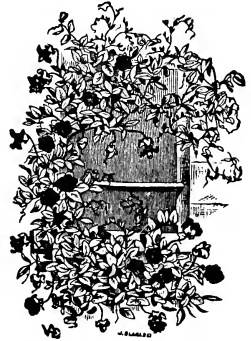
CLARKIA.

A very beautiful hardy annual, about eighteen inches high, blooming from June to September. Set six inches apart.

FINE MIXED. Ounce 30c..... 5



CLARKIA.



COBÆA SCANDENS.

COBÆA SCANDENS.

The most useful of climbers, on account of its rapid growth, fine foliage, and large, bell-shaped flowers, purple in color. In sowing place the seeds edgewise and cover lightly.... 10

COCKSCOMB.

Very singular and attractive, half-hardy annuals, about two feet high. To perfect the flowers they should be sown in the hotbeds and transplanted into rich soil one foot apart.

MIXED. Double 10

COLEUS.

One of the most popular foliage plants. Is very decorative in the flower border, and easily grown from seed, which frequently produces new and distinct varieties.

NEW HYBRIDS. Mixed..... 15

CONVOLVULUS MAJOR.**(Morning Glory.)**

A well-known beautiful, climbing annual, suitable for covering arbors, trellises, etc. Blooms from July until autumn.

FINE MIXED. Ounce 10c. 5

JAPANESE. Gigantic flowers, exquisite new colors, magnificent foliage. Finest mixed..... 5



MORNING GLORY.

CONVOLVULUS MINOR.

Beautiful and showy, half-hardy annuals, producing an abundance of rich colored flowers. Set plants one foot apart. Blooms from July until autumn.

FINE MIXED 5

MAURITANICUS. Beautiful for hanging baskets and vases. Flowers blue 5



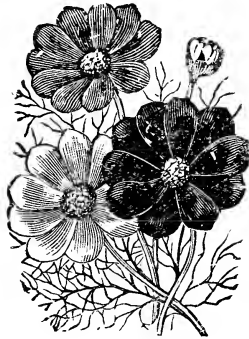
COREOPSIS.

COREOPSIS.

Per Pkt.

Showy, hardy annuals about two feet high, succeeding well in any soil. Produces a fine effect when grown in a mass. Blooms from June until September.

FINE MIXED 5
 DRUMMOND'S. Large yellow. 5



COSMOS.

COSMOS.

Splendid flower for cutting purposes, plants growing five to seven feet high, which are beautiful masses of the most elegant foliage, with hundreds of large, showy blossoms. Both foliage and flowers are excellent for cutting. Sow seed early in spring and transplant to the garden in June.

EARLY FLOWERING. Mixed colors..... 10
 LADY LENNOX. Tall growing, late variety, with gigantic shell-pink flowers, borne on long stems..... 10

CYPRUS VINE.

One of the most popular of all summer climbers; flowers small, thickly set in a most beautiful dark-green foliage, forming a striking contrast. Tender annuals.

SCARLET..... 5



DAHLIA.

DAHLIA.

Plant in a shallow box or pan early in March or April, transplant carefully and keep the soil moderately moist. When all danger from frost is over set out in the bed or border in the garden.

FINEST MIXED. Single... 10
 FINEST MIXED. Double.. 10

DATURA.

Beautiful, half-hardy annual, growing from two to three feet in height and producing very large flowers; continues in bloom from July until September.

MIXED 5

DRACOENA.

Beautiful, ornamental-leaved plant, extensively used in vases and for house decoration.

INDIVISA. Narrow, dark green foliage..... 10

ESCHSCHOLTZIA.
(California Poppy.)

A very showy, hardy annual, about one foot high, blooming from June until September. Produces a brilliant effect; admirable for borders when grown in a mass.

ALBA. White..... 5
 CALIFORNICA. Yellow; orange center..... 5
 MANDARIN. Orange and scarlet..... 5
 FINEST SINGLE MIXED.... 5
 CARTER'S CARMINE KING. A splendid new variety, of a beautiful carmine-rose color..... 10



ESCHSCHOLTZIA.

FEVERFEW. (Pyrethrum.)

Per Pkt.

Handsome, free-flowering, highly ornamental plants, producing a fine effect in the mixed flower and shrubby borders. Succeeds in any rich soil.

DOUBLE WHITE..... 5
 GOLDEN FEATHER. Prized for its yellow foliage..... 5

GAILLARDIA.

Showy and universally-admired annual. Very beautiful; fine for bedding and bouquets. Flowers two to three inches across, blooming until late in the fall.

FINE MIXED..... 5

GOURDS.

A valuable and highly interesting class of climbing plants. Tender annuals.

AFRICAN PIPE. The stem end used in making pipes..... 5
 BOTTLE. Well known, bottle shaped..... 5
 HERCULES CLUB. Club shaped; very long..... 5
 NEW MINIATURE. Orange and green striped; one of the best..... 5
 ORANGE. Very ornamental, fruit resembling an orange.... 5
 POWDER HORN..... 5
 FINE MIXED..... 5

GLOBE AMARANTH.

A tender annual, about two feet high, very ornamental in the garden. The flowers will retain their beauty for a long time if gathered and dried as soon as they are open. Start early in hotbeds, and transplant one foot apart in the border when the weather becomes warm.

MIXED 5



GLOXINIA.

GLOXINIA.

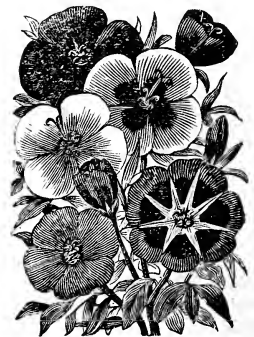
Greenhouse plants, producing richly colored and brilliant flowers. Greenhouse perennial.

CARTER'S INVINCIBLE PRIZE. Contains all the best self-colors, crimson, sapphire, purple, ruby, rose, bluish violet and white, together with the most beautiful spotted or marbled kinds..... 25

GODETIA.

Very attractive hardy annual of easy culture, about one foot high, flowering in July and August.

FINE MIXED..... 5



GODETIA.

GREVILLEA ROBUSTA.

Per Pkt.

A very graceful decorative plant, with evergreen, fern-like foliage. Tender perennial. 5

GYPSOPHILIA.

A free-flowering annual that should be in every garden, for it thrives abundantly, furnishing the loveliest material for bouquets.

ELEGANS. Hardy annual; pure white 5

HELICHRYSUM. (Eternal Flower.)

A hardy annual, very ornamental in the garden, and very desirable for winter bouquets, as they will retain their form and color for years if gathered and dried when first open.

DOUBLE YELLOW 5

DOUBLE WHITE 5

DOUBLE SCARLET 5

DOUBLE PURPLE 5

DOUBLE FINE MIXED 5

HELIOTROPE.

A well-known, half-hardy perennial, particularly prized on account of its delightful fragrance. It is well adapted for bedding or pot culture. Sow the seeds early in spring, in pots or in the hothouse, and transplant into the garden when the weather becomes warm.

FINEST MIXED. Dark varieties 10



HELIOTROPE.

HUMULUS. (Japan Hop.)

Rapid summer climber, resembling the common hop, but, being an annual, attains full perfection the first season. The foliage is luxuriant, making a dense covering. It is one of the best plants for covering verandas, trellises, etc., producing grateful shade and being very ornamental. Heat, drought and insects do not trouble it. 5

HYACINTH BEAN.

Tender, climbing annual, producing clusters of blue and white flowers; 10 ft. 5

ICE PLANT.

A singular-looking, tender annual, with thick, fleshy leaves that have the appearance of being covered with crystals of ice. Start early in pots and transplant into light, sandy soil, in a warm situation. 5

IPOMOEA. (Moon Flower.)

The ipomoeas are climbers of rapid growth and bear immense fragrant flowers of glistening white seven to eight inches across. The flowers open at sunset and close the next morning. To hasten germination soak seed in warm water a few hours. Flowers large, white 10

KOCHIA TRICHOPHYLLA. (Glowing Ball.)

This ornamental annual plant grows quickly from seed sown in the open ground, when the trees are coming out in leaf, and the plants are always of a rounded or globe-like form. The stems are clothed with slender, light green leaves. Early in the fall the ends of the shoots are set thickly with small, bright scarlet flowers, the bushy plants resembling balls of fire. The plants are equally showy planted singly to show the round ball-like form on all sides or grown in continuous rows 5

LANTANA.

Per Pkt.

Highly valuable plants of vigorous growth and branching habit, producing brilliantly-colored flowers constantly changing in hue. Very effective, either for pot culture or for bedding.

FINE MIXED 5

LARKSPUR.

Very beautiful, showy annuals, producing dense spikes of flowers, which are very decorative, either in the garden or when cut for vases. Set ten inches apart.

DWARF DOUBLE ROCKET. Finest mixed. 1 ft. 5

DOUBLE BRANCHING. Fine mixed. 2 ft. 5

LAVENDER.

A shrubby plant, blossom of delightful fragrance. 5

LINUM. (Flowering Scarlet Flax.)

GRANDIFLORUM RUBRUM. Brilliant, dark scarlet. Hardy annual 5

LOBELIA.

Most excellent and useful plants, free-flowering and of easy culture. Fine for borders, baskets, vases and window boxes.

GRACILIS. Fine for hanging baskets, vases, etc.; light blue; trailing 5

CRYSTAL PALACE. Compact; dark blue; excellent for edging 5

WHITE GEM. The best white variety for edging 5

CARDINALIS. Long spikes, bright scarlet flowers. 10



LOPHOSPERMUM.

LOPHOSPERMUM.

One of the most beautiful climbing annuals. Graceful flowers of large size, resembling foxgloves in shape, and of a rich rose color. The foliage is of velvety texture.

SCANDENS. Rose 10

LOVE-LIES-BLEEDING.

A hardy annual, three to four feet high, with pendant spikes of blood-red flowers. 5

LOVE-IN-A-MIST. (Nigilla.)

A curious, hardy annual about one foot high, with finely cut leaves and singular flowers.

MIXED 5

LUPINUS. (Lupine.)

This is a very interesting class of plants and of easy culture, producing beautiful leaves and pea-shaped flowers, and should be more generally cultivated. The following annual varieties may be sown out in the open in May and as plants grow thin out, leaving about twelve inches between the plants.

FINE MIXED. Annual 5

MARVEL OF PERU. (Four O'clock.)

The old and well-known four o'clock. A beautiful plant, with flowers of various colors, making a fine summer hedge when set one foot apart. Grows two feet high.

FINE MIXED 5

MARIGOLD.

Per Pkt.



MARIGOLD.

Extremely showy, half-hardy annual, one to two feet high, well adapted to garden culture, blooming profusely through the season. Set one foot apart. The African varieties are the taller in growth, and produce large self-colored blossoms. The French varieties are smaller, some of them being elegantly striped and spotted. The dwarf-growing kinds make extremely handsome borders, remaining in full bloom until killed by frost.

- AFRICAN. Double mixed 5
- AFRICAN. Orange 5
- FRENCH. Double mixed 5

LEGION OF HONOR. Single flowering, about nine inches high; golden yellow, with large spot of velvety crimson .. 5

MAURANDIA.

An elegant, half-hardy, climbing plant, blooming the first season if sown early, and is well adapted to the conservatory or trellis work in the garden. Start early in pots, transplant when the weather becomes warm. Continues in bloom through the season.

BARCLAYANA. Rich violet flowers..... 10

MORNING GLORY. (See Convolvulus.)

MOURNING BRIDE. (Scabiosa.)

These beautiful, hardy annuals are in great demand. They grow about two and one-half feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are much in demand. The various shades are very charming, but are equally well adapted for borders or beds, where they display themselves very effectively. Seeds should be sown any time in the spring after danger of frost is past.

- PURPLE..... 5
- RED 5
- WHITE 5
- FINEST MIXED 5

MIGNONETTE.

A well-known, hardy annual, universally grown and esteemed for its delicious fragrance. If well thinned out, the plants will grow stronger and produce larger spikes of bloom.

Mignonette, Sweet.

Large-flowered variety, very fragrant. Per ounce, 15c..... 5

Dwarf, Compact.

A very desirable variety, distinct in character, forming a dwarf, dense bush... 5

Large Flowered, Pyramidal.

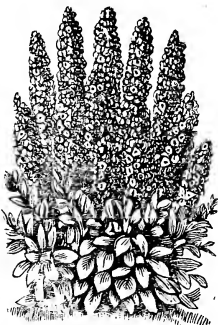
Greatly superior to the old variety of pyramidal growth and much larger flowers 5

Machet.

The finest variety for pot culture; sweet-scented, red flowers..... 6

White Pearl.

Flowers nearly white; a desirable variety. 5



MIGNONETTE.

MIGNONETTE—Continued.

Per Pkt.

Gabriele.

A variety of dwarf pyramidal growth with large spikes of reddish flowers; fine for pots, or in the open ground 5

Allen's Defiance.

Spikes of immense size; deliciously fragrant..... 10

MIMULUS.

Handsome, profuse-blooming plants, with flowers of singular form and brilliant colors, fine for greenhouse or shady situations. Blooms from seed the first year.

FINE MIXED 10

MUSK PLANT.

Much esteemed for the strong musk odor of its leaves. It has a yellow bloom 10



NEMOPHILA.

NEMOPHILA.

Charming hardy, low annual, producing an abundance of extremely delicate and beautiful flowers. Very useful for bedding or for pot culture. Sow early in pots and transplant into a cool, rather moist, location.

INSIGNIS. Clear, bright blue, white center..... 5

FINEST MIXED 5

NICOTIANA.

Deliciously fragrant flowers, very ornamental, of easy cultivation, excellent for cutting. Half-hardy annuals.

AFFINIS. White, very fragrant 5

SYLVESTRIS. Plants of pyramidal growth, about four feet high. Flowers pure white and very fragrant 10

SANDERAE. Branching habit; two feet. Strikingly beautiful plants. Blossoms brilliant carmine-red; delicious fragrance..... 10



NICOTIANA.

NOLANA.

Very pretty trailing, hardy annuals; fine for rockwork, hanging baskets or for bedding. Select light, rich soil.

FINE MIXED 5

OXALIS.

Elegant flowering plants, particularly adapted for the greenhouse or parlor, where they bloom in mid-winter.

FINE MIXED VARIETIES..... 10

OENOTHERA. (Evening Primrose.)

A half-hardy annual and perennial, about six inches high, bearing bright, showy flowers in white, pale yellow, rose, etc. Of the easiest culture.

MIXED ANNUAL SORTS 5

MIXED PERENNIAL SORTS 5



NASTURTIIUM.

One of the most popular flowers of the present time, and constantly growing in favor. Is a rapid climber, of easiest culture, bearing beautifully colored flowers in profusion until killed by frost. Hardy annual.

The "K. & W." Mixed Varieties, both Tall and Dwarf, cannot be surpassed for brilliancy and variety of color. The plants, for about three months in the year, produce a lavish profusion of bloom, even through the hottest weather, and a trial of them is sure to give great satisfaction.

NASTURTIIUM. (Tall.)

	Per Pkt.
CRIMSON	5
DUNNETT'S ORANGE. Pure orange.....	5
EDUARD OTTO. Brownish lilac.....	5
HEINEMANNI. Chocolate color	5
PEARL. Creamy white	5
PRINCE HENRY. Cream, spotted and tipped scarlet	5
REGELIANUM. Purplish violet.....	5
SCARLET.....	5
SHELLINGH. Yellow spotted	5
SCHUCRIANUM. Straw colored, spotted brown	5
VESUVIUS. Salmon-rose; an exquisite shade.....	5
VON MOLTKE. Dark rose	5
YELLOW.....	5

"K. & W." Mixed Varieties.

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.60	.85	.50	.15	.05

COLLECTION OF 6 PKTS., 25

NASTURTIIUM—Continued.

Per Pkt.

NASTURTIIUM. (Dwarf.)

The dwarf improved varieties of nasturtium are among the most useful and beautiful of garden favorites for bedding, massing or ribboning. Hardy annuals.

BRONZE. Bronze-orange	5
CLOTH OF GOLD. Scarlet flowers and yellow foliage	5
CRIMSON	5
CRYSTAL PALACE GEM. Sulphur, maroon blotches.....	5
EMPRESS OF INDIA. Fiery crimson, dark foliage.....	5
GOLDEN KING. Rich, golden yellow.....	5
KING THEODORE. Deep crimson maroon, dark foliage.....	5
KING OF TOM THUMBS. Dark scarlet, dark leaves.....	5
LADY BIRD. Orange-yellow; suffused with red and a bright red blotch at the base of the petals.....	5
RUBY KING. Rich crimson rose	5
SCARLET.....	5
SPOTTED. Golden yellow, spotted garnet.....	5
YELLOW	5
LILLIPUT. The most dwarf of all nasturtiums. Of compact growth with the bloom in a beautiful mass above the foliage; fine for potting and bedding	5

"K. & W." Mixed Varieties.

1 lb.	½ lb.	¼ lb.	1 oz.	Pkt.
\$1.60	.85	.50	.15	.05

COLLECTION OF 6 PKTS., 25

SWEET PEAS.

Sweet peas are among the most desirable hardy annuals grown, being exceedingly beautiful and highly ornamental, and will grow and blossom well in any good garden soil. Select an open, sunny location, and sow as early as the ground can be worked in the spring, to enable the vines to get a good strong growth before the warm weather comes.

CULTURE.

Early in spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it and plant the seed in the bottom, covering at first only one inch deep. In soils at all heavy, or composed largely of clay, put about one inch of sand in the bottom of the trench and sow the seed on this, covering with more sand. Cover the row with a board to shed the rain and protect the soil from the hot sun, but remove this as soon as the young plants appear.

When the plants are two inches high, cultivate and as they grow gradually fill up the trench. When the plants are about five inches high it is desirable to furnish some support for the vines to run upon, preferably a wire netting firmly supported by stakes to prevent sagging, but strings or brush are often used with satisfactory results.

The roots should not be allowed to become too dry. Water applied thoroughly once or twice a week, preferably early in the morning or in the evening, is usually better than light sprinkling more frequently.

The blooms should be picked before they form pods or the plants will soon stop flowering.

**INOCULATE, FOR BEST RESULTS, WITH NITROGEN
FIXING BACTERIA.**

SWEET PEAS—Continued.**SUPERB FLOWERED
SPENCER VARIETIES.**

The Waved or Spencer class represents a type of sweet pea the original of which, the Countess, is still the best and most popular pink. They are strong growers, bear long stems and very large blossoms, with usually four blossoms to a stem. The standard is large, round, and fluted or wavy on the edges. The wings, too, are large and more or less wavy, but not so much so as the standard.

The following named varieties constitute a list of many of the finest strains produced.

	Pkt.	Oz.
WHITE.		
ENCHANTRESS. Fine pure white.....	10	20
KING WHITE. Giant white; the largest white Spencer type.....	10	20
WHITE SPENCER. Large pure white	10	20

PRIMROSE, CREAM OR IVORY.

MRS. C. W. BREADMORE. Primrose, with rose edge	10	20
--	----	----

LIGHT PINK SHADES.

APPLE BLOSSOM. Rosy pink, blended with light blush	10	20
COUNTRESS. Fine pure, clear pink; very large.....	10	20

DEEP, BRIGHT PINK.

DAZZLER. Brilliant orange pink.....	10	20
MARY GARDEN. Clear pink on cream	10	20
NEW MARION BEAVER. Finest shade of pink. Color salmon shell-pink on cream.....	10	20
ROSABELLE. Giant rosy pink.....	10	20

ORANGE AND SALMON.

BARBARA. Handsome large salmon orange.....	10	20
BERTRAND DEAL. Rosy mauve on cream	10	20
ILLUMINATOR. Salmon cerise and orange	10	20
MELBA. Pale salmon.....	10	20

SHADES OF RED.

KING EDWARD. Pure, deep red; very large.....	10	20
THE PRESIDENT. Brilliant, dazzling orange scarlet.....	10	20
VERMILION BRILLIANT. Intense, bright scarlet.....	10	20

EDGED.

BLUE PICOTEE. White, with blue edge	10	20
DAINTY. White, with rose pink edge.....	10	20
MARTHA WASHINGTON. White edged with rose.....	10	20

LAVENDER SHADES.

ASTA OHN. Pinkish lavender..	10	20
FLORENCE NIGHTINGALE. Soft bluish lavender.....	10	20

SHADES OF BLUE.

MARKS TEY. Violet-bronze wings.....	10	20
ZEPHYR. Bright blue	10	20

PURPLE AND MAROON.

CHARLES FOSTER. Mauve and pink, shading light purple ...	10	20
ROYAL PURPLE. Rich, deep pur- ple	10	20

MIXED VARIETIES	10	20
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1 lb.	½ lb.	¼ lb.
\$2.25	\$1.25	.70

SWEET PEAS—Continued.**GRANDIFLORA TYPE.**

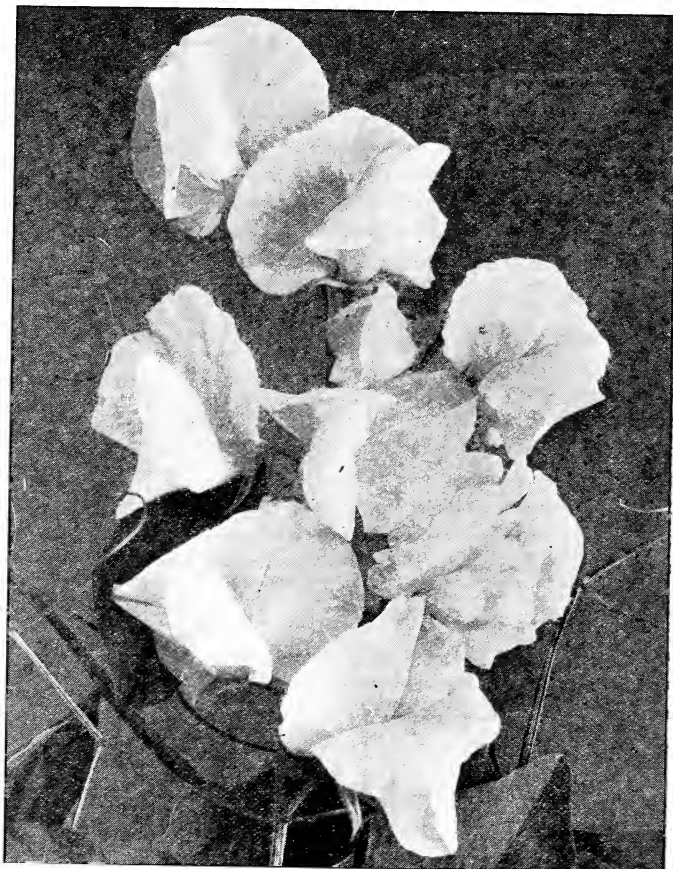
Owing to the increased demand for the Spencer sweet peas, and the fact that many of the named varieties of the Grandiflora type are one and the same, we have discontinued cataloging the named varieties of Grandiflora sweet peas and will list only the different colors, for which we will select what we consider the best.

	Pkt.	Oz.
WHITE.....	5	10
LIGHT PINK	5	10
DEEP, BRIGHT PINK.....	5	10
PINK AND WHITE	5	10
RED	5	10
LAVENDER	5	10
BLUE	5	10

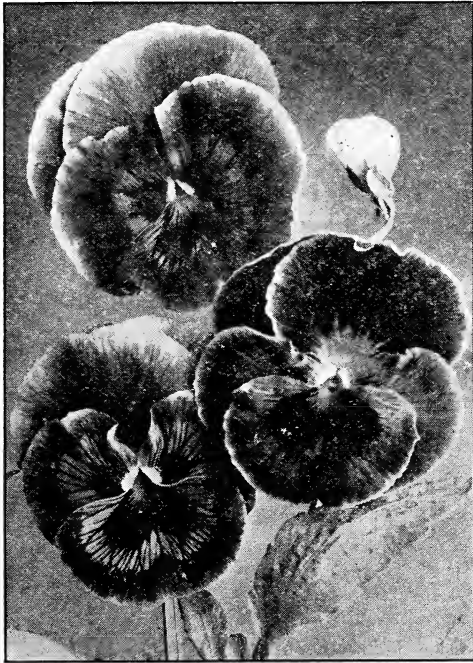
"K. & W." CHOICE MIXED. This magnificent assortment is a mixture of the finest varieties produced, the flowers being of the largest sorts, and so combined as to give the most delightful harmony of colors. Fine mixed.....

5 10

1 lb.	½ lb.	¼ lb.
\$1.00	.55	.35



SWEET PEAS.

**PANSY.**

Good results may be obtained from sowing seed in May in a light, cool, but well-moistened soil, enriched with a slight amount of barnyard manure or fine ground bone. Sow seed in drills, covering them five times their diameter, and firm soil. Water once a day, except in very dry weather, when they may be watered twice a day. Seed will germinate in about two weeks and should not be allowed to dry out. A small covering of newspapers will prevent drying out. When plants are large enough to handle, they should be transplanted to a distance of one foot apart. Where greenhouse and cold frame facilities are at hand, seed may be sown in July or August and plants protected during winter.

"K. & W." EXTRA CHOICE MIXED. This is a mixture composed of the finest varieties of large flowering pansies and for years has been giving splendid satisfaction. 10

NON PLUS ULTRA. A mixture of pansies designed for the buyer who wishes his beds of the finest colors and greatest variety possible. 15

GIANT TRIMARDEAU. Very large flowers of the most varied colors. Mixed. 10

BUGNOT. A French variety, of large size, beautiful colors, handsome broad blotches, finely penciled with stripes of delicate hue. 15

KING OF THE BLACKS. Velvety jet black. 10

ODIER. Finest blotched. 10

BLUE. Beautiful light blue. 10

YELLOW. Pure golden yellow. 10

PURPLE. Dark, rich purple. 10

WHITE. Pure white; dark eye. 10

FINE MIXED. 5

PASSION FLOWER.

A splendid class of climbers, with curious flowers produced in great profusion; fine for conservatory or will answer for the garden, flowering freely during the autumn.

FINE MIXED. 10

PERILLA NANKINENSIS.

Per Pkt.

An annual, growing from two to two and one-half feet; stems branching, well covered with an ample foliage of a dark purple, almost black. 5



PETUNIA.

PETUNIA.

Favorite, hardy annuals, succeeding well in any rich soil. For the brilliancy and variety of their colors, their abundance of flowers and the long duration of their blooming period, they are indispensable in any garden.

DOUBLE FRINGED. Extremely double, edges finely fringed, petals fluted and crinkled, unmatched by crumpled velvet, which the flowers resemble. 25

SINGLE FRINGED. Choicest fringed sorts. 15

CALIFORNIA GIANTS. A strain of incomparable beauty, size and luxuriance. The flowers are exquisitely ruffled or fringed on the edges, and are enormous. 25

ROSY MORN. Soft carmine-pink, white center; used very extensively for borders, beds or rockeries. 10

WHITE. Single, large, pure white. 5

FINE MIXED. Single varieties. 5

PHLOX DRUMMONDI.

The flowers are of extreme beauty, and are greatly admired by all. Their long duration in bloom, combined with their almost unequalled richness of color, make them invaluable in the general flower garden. Hardy annuals.

PURE WHITE. 5

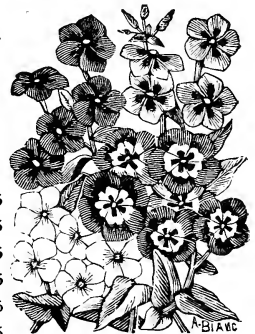
PURE DEEP SCARLET. 5

ROSE. 5

YELLOW. 5

CRIMSON. 5

FINEST MIXED. Ounce \$1.00.. 5



PHLOX.

PINK.**(Dianthus.)**

One of the most popular flowers in cultivation, producing a great variety of brilliant colors and profusion of bloom.

HEDDEWIGI. Flowers very large, and of rich and brilliant color. Hardy annual. 10

CHINESE. Splendid double mixed. 5

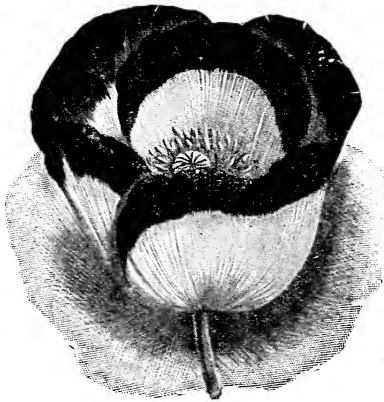


HEDDEWIGI PINK.

CARNATION "MARGUERITE". Very early, and when sown in the spring will bloom in July or August and continue until frost, or may be potted to bloom during the winter in the house. Many of the flowers are double, and are finely fringed and fragrant.

GIANT MIXED. Extra large, flowering profusely, in brightest colors. 10

POPPY.



ADMIRAL POPPY.

Brilliant and showy, hardy annual, growing freely in any garden soil. Sow as early in spring as the weather will permit at intervals for a succession. Barely cover seed; PRESS DOWN FIRMLY, and when up thin to six inches apart. 2 ft.

DOUBLE FLOWERING VARIETIES.

Per Pkt.

- CARDINAL. Dark foliage, deeply cut; very double flowers. Color vivid scarlet on white ground 5
- MIKADO. Double white, fringed flowers, crimson margins.. 5
- WHITE SWAN. The acme of perfection in double poppies. The profusely produced blossoms are perfectly formed, and the purity of their color is beyond reproach 10
- DOUBLE SCARLET..... 5
- FINE DOUBLE MIXED..... 5

SINGLE FLOWERING VARIETIES.

- ADMIRAL. Single, peony-flowered variety. Glistening pure white, with scarlet band around the top; very handsome. 10
- PEACOCK. Cup-shaped, crimson blossoms, with ring of black at the base of the petals; equally good for pots or borders. 10
- SHIRLEY. Beautiful strain of single mixed poppies; bright, delicate colors; fine for cutting 5
- TULIP. Grows twelve to fourteen inches high, and produces well above the foliage fifty to sixty large flowers of the most brilliant scarlet..... 5

PORTULACA.



PORTULACA.

Very popular, low-growing, hardy annuals, making a most brilliant display in the garden, and very suitable for borders or edgings. Sow early in warm, light, rich soil and thin plants to four inches.

- SINGLE CRIMSON .. 5
- SINGLE SCARLET... 5
- SINGLE WHITE 5
- SINGLE YELLOW... 5
- SINGLE, ALL COL- 5
- ORS MIXED 5
- DOUBLE FINEST 10
- MIXED..... 10

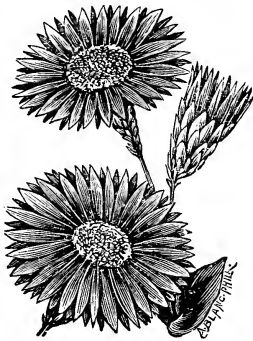
PRINCE'S FEATHER.

Ornamental plants, with elegant plumes of rich colored flowers.

- LARGE FLOWERED. Crimson; 2 ft. 5

RHODANTHE.

Per Pkt.



RHODANTHE.

A well-known everlasting; valuable for the decoration of the conservatory and flower garden; fine for bedding or ribboning. The flowers, if gathered when young, make valuable winter bouquets; succeed best in a light, rich soil and a warm, sheltered situation. Half-hardy annual; 1½ ft.

- FINE MIXED 5

RICINUS.
(Castor Bean.)

Plants with very ornamental foliage and showy fruit and quite a tropical appearance. With other ornamental-leaved plants, they make a most attractive bed on the lawn, and are also desirable when grown as single specimens. Half-hardy annuals.

- BARBONENSIS ARBOREUS. Beautiful, large green foliage; 10 ft. 5



RICINUS.

- CAMBODGENSIS. Dark foliage; black stem; 9 ft. 5
- SANGUINEUS. Scarlet fruited; 6 ft..... 5
- ZANZIBARIENSIS. Immense, dark green foliage; 12 ft..... 5
- MIXED VARIETIES 5

ROSE CAMPION.

The rose campion is perfectly hardy and very easily raised from seed. The flowers are produced on long stems, blooming freely throughout the season.

- FINE MIXED 5



SALPIGLOSSIS.

SALPIGLOSSIS.

Very beautiful, rich, half-hardy annuals, one and one-half feet high. Start early in the hotbed and transplant to light, warm, rich soil. Blooms from July to September.

- FINE MIXED 10

SALVIA.

Very ornamental, producing tall spikes of brilliant flowers. Start early in hotbeds and transplant two feet apart. Half-hardy annual.

- SPLENDENS. Brilliant scarlet flowers 10
- BONFIRE. This variety is one of the finest salvia for bedding yet introduced. The plants grow into very compact oval bushes about two and one-half feet high, and produce long spikes of brilliant scarlet flowers. 10



SALVIA.

SCHIZANTHUS.

Per Pkt.

Tender annual, one to one and one-half feet high, blooming from August to October. Fine for pot culture.

FINE MIXED 5

SENSITIVE PLANT.

A pretty, curious annual, being so sensitive that the leaves close together at the slightest touch 5

SMILAX.

A beautiful winter climbing plant, adapted to the conservatory. Nothing can excel this plant in beauty of foliage and orange fragrance of the flower. Extensively used for bouquets and floral decorations of every description 5



STOCKS.

STOCKS.

Half-hardy annual, producing splendid spikes of very rich and beautiful flowers of delightful fragrance. For early flowering sow early in the spring, in pots or in the hotbed, and transplant one foot apart. Blooms from June until October.

EARLY LARGE-FLOWERING WINTER STOCK.

BEAUTY OF NICE. Strong spikes, with large flowers of a delicate flesh pink 10

QUEEN ALEXANDRA. New. Rosy lilac. Splendid 10

CUT AND COME AGAIN.

DRESDEN PERPETUAL. Plants of robust growth and branching habit. If sown early commences blooming in June and continues until frost, producing flowers in September and October, when other varieties have faded. Fine for cutting.

ALL COLORS MIXED 10

PRINCESS ALICE. White 10

GIANT PERFECTION. Ten weeks stock.

WHITE. Ten weeks, double 10

PURPLE. Ten weeks, double 10

SCARLET. Ten weeks, double 10

MIXED. Ten weeks, double 10

SUNFLOWER.

Well-known, showy plants; remarkable for their rapid and stately growth and the large size and brilliancy of their flowers.

CALIFORNIA. Double, bright yellow flowers 5

MAMMOTH RUSSIAN. Very large flowers 5

NEW MINIATURE. An improvement on the miniature. Covered with hundreds of brightest orange flowers. The blooms are of a variety of shades, sizes and shapes of petals 5

SWEET SULTAN.

Showy, hardy annual, one to two feet high, succeeding well in any soil. The beautiful, sweet-scented flowers are borne on long, stiff stems, making them well adapted for cutting.

FINE MIXED 5

TASSEL FLOWER.

Per Pkt.

A beautiful, half-hardy annual, with small, tassel-like flowers, blooming profusely from July to October.

SCARLET 5

THUNBERGIA.

Very ornamental, trailing, half-hardy annual, admirably adapted for trellis or rustic work, or for the conservatory.

FINE MIXED 10

VERBENA.

Well-known and universally popular bedding plant, blooming all summer. Plants grown from seed are more healthy and make larger and harder plants than those from cuttings. If sown in spring will flower quite early.

CANDIDISSIMA. Pure white 10

SCARLET DEFIANCE. Brightest scarlet 10

MAMMOTH FINEST MIXED 10

LEMON. Every garden should have a few plants of this fragrant favorite. Its pale green, delightfully scented foliage goes well with any flower 10

VISCARIA.

Very pretty, profuse-flowering, half-hardy annual, producing a fine effect in beds or mixed borders, and growing readily in any soil.

FINE MIXED 5

WALLFLOWER.

Very fragrant and ornamental, suitable for background and amongst shrubbery.

FINE MIXED 5

WHITLAVIA.

Charming, hardy annual, with delicate foliage and clusters of beautiful, bell-shaped flowers; fine for ribboning or mixed borders; 1 ft.

FINE MIXED 5



WHITLAVIA.

WILD CUCUMBER VINE.

A very rapid-growing climber which reaches a height of fifteen or twenty feet during the season. It is covered with clusters of white, sweet-scented flowers, followed by an abundance of ornamental prickly seed pods. It will quickly cover a trellis, pillar or an unsightly building, and will reproduce itself from self-sown seed every year. Soak seed over night in warm water. Hardy annual 5

WILD GARDEN SEED.

Per Pkt.

A mixture composed of a large number of varieties of flower seeds. These are usually sown in a bed by themselves..... 5

ZEA. (Japanese Maize.)

An ornamental foliage plant. Grows to the height of four or five feet, furnished from the bottom with long, wavy leaves, broadly ribbed with alternate stripes of white and green.

STRIPED..... 5

ZINNIA.

Per Pkt.

A most splendid class of hardy annuals, and one of the finest summer flowering plants. The flowers are large, handsome, and in a very great variety of colors, blooming throughout the whole season. Start early in pots or under glass and transplant one foot apart.

HAAGEANA. Double, orange; 1 ft..... 5

DOUBLE GIANT MIXED..... 5

CURLED AND CRESTED. Large, double flowers, with petals twisted, curled and crested into the most fantastic and graceful forms. Usual range of colors..... 5



DOUBLE ZINNIA.

HARDY PERENNIALS AND BIENNIALS.

This class of flowers is coming into increased favor each year. The seed may be sown in the spring, or later in July or August. If sown at the latter time, it is well to sow in a shaded, moist place, or to keep the ground shaded and well watered until the seed appears.

ALYSSUM.

Per Pkt.

SAXATILE COMPACTA. Grows about nine inches high, producing a mass of golden yellow flowers..... 5

AQUILEGIA. (Columbine.)

Grows about two feet high, blooming in May or June.

MIXED..... 5



DOUBLE DAISY.

BELLIS PERENNIS.

(Double Daisy.)

Fine for bordering. Set six inches apart.

WHITE..... 10

RED..... 10

MIXED..... 10



CANTERBURY BELLS.

CANTERBURY BELLS.

Large, bell-shaped flowers, blooming in July. Grows two feet high.

BLUE..... 10

WHITE..... 10

MIXED..... 10

DIGITALIS. (Foxglove.)

This is a very ornamental biennial plant, almost three feet high. The racemes of thimble-shaped flowers are often two feet long.

GLOXINEAFLORA. Mixed. Spotted flower..... 5

DELPHINIUM. (Larkspur.)

Per Pkt.

One of the finest perennials, growing four feet high, and lasting a long time in flower.

FORMOSUM. Blue with white eye..... 5

DIANTHUS. (Pink.)

CARNATION. A magnificent class of popular flowers, very fragrant, and of rich and beautiful colors. Hardy perennial..... 10

GYPSOPHILIA. (Baby's Breath.)

Delicate, mist-like flowers. Fine for bouquets. Grows two feet high.

PANICULATA. White. Blooms the first year, if sown early.. 5



FORGET-ME-NOT.

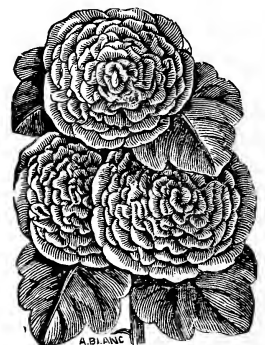
MYOSOTES.

(Forget-Me-Not.)

Low-growing plants, preferring moist, shady places.

VICTORIA. Dwarf, sky blue.. 5

MIXED..... 5



HOLLYHOCK.

HOLLYHOCK.

Showy perennials, about four to five feet high.

DOUBLE MIXED. Extra choice..... 10

DOUBLE FINE MIXED..... 5

SINGLE MIXED..... 5

HONESTY.

A hardy biennial, two feet high, flowering the second year in May and June. The flowers are succeeded by singular semi-transparent seed vessels that are quite ornamental and may be kept for a long time..... 5

PERENNIAL PHLOX.

Per Pkt.

One of the most beautiful of the perennials, growing two to three feet high, with large heads of flowers 10

PERENNIAL POPPY.

ICELAND. Blooms the first year from seed. Colors range from white to orange 5

ORIENTAL. Very large bright scarlet flowers. Fine for borders and amongst shrubbery 10

POLYANTHUS.

Grows about one foot high, blooming in June and July ... 10

SHASTA DAISY.

A hardy perennial, lasting in bloom for a long time. Flowers are white, and from one to four inches across. 10



SWEET WILLIAM.

SWEET WILLIAM.

One of the most showy of the perennials, bearing large trusses of flowers.

WHITE..... 5

PINK..... 5

CRIMSON..... 5

MIXED..... 5

SWEET ROCKET.

Per Pkt.

An early flowering perennial, about eighteen inches high, with fragrant purple and white flowers..... 5

EVERLASTINGS.

Page

These are flowers whose blossoms, if gathered when first opened and dried in shade, will keep bright for months.

ACROLINIUM..... 4

AMMOBIUM..... 4

GLOBE AMARANTH..... 7

HELICHRYSUM..... 8

RHODANTHE..... 13

CLIMBERS.

FLOWERING BEANS..... 4

CANARY BIRD VINE..... 5

COBÆA SCANDENS..... 5

CYPRESS VINE..... 6

GOURDS..... 6

HYACINTH BEAN..... 7

HUMULUS (Hop Vine)..... 7

LOPHOSPERMUM..... 7

MAURANDIA..... 8

MOON FLOWER..... 7

MORNING GLORY..... 5

NASTURTIUM..... 9

PASSION FLOWER..... 11

SWEET PEAS..... 9-10

THUNBERGIA..... 13

WILD CUCUMBER..... 13

SWEET AND MEDICINAL HERBS.

Sow in spring, in shallow drills, one foot apart and when well up thin out or transplant to a proper distance apart.

	Pkt.		Pkt.		Pkt.
Anise. Annual.....	.05	Fennel, Sweet. Perennial.....	.05	Rue. Perennial.....	.05
Balm. Perennial.....	.05	Horehound. Perennial.....	.05	Saffron. Annual.....	.05
Basil, Sweet. Annual.....	.05	Hyssop. Perennial.....	.05	Sage. Annual.....	.05
Caraway. Biennial.....	.05	Lavender. Perennial.....	.05	Summer Savory. Annual.....	.05
Catnip. Perennial.....	.10	Marjoram, Sweet. Annual.....	.05	Thyme. Perennial.....	.05
Coriander. Annual.....	.05	Mint.....	.10	Wormwood. Perennial.....	.05
Dill. Biennial.....	.05				

HARDY PLANTS AND SHRUBS.

These can be supplied on short notice. The demand for hardy perennials is continually on the increase, as they bloom year after year with only slight care.

BEDDING PLANTS.

GERANIUMS in 3-inch and 4-inch pots.

CANNAS and FUCHSIAS in 4-inch pots.

HELIOTROPE, CALENDULAS and LOBELIAS in 3-inch pots.

Potted plants and plants in baskets and boxes cannot be sent by mail.

FLOWER SEEDLINGS.

Aster,	Pinks,	Petunia,	Stock,	Pansies (choice strain),
Marigold,	Phlox,	Snapdragon,	Zinnia,	Verbenas.

Prices subject to change without notice. (See note on page 2.)

SUMMER-FLOWERING BULBS.

GLADIOLUS.

Plant in good garden soil, after the ground becomes warm in the spring, in full exposure to the sun. Set bulbs from 4 to 6 inches deep.

America. Soft pink. Per doz., 50c.; per 100, \$3.50.

Augusta. White. Per doz., 50c.; per 100, \$3.50.

Baron Joseph Hulot. Deep blue. Per doz., 80c.; per 100, \$6.00.

Mrs. Francis King. Flame pink. Per doz., 50c.; per 100, \$3.50.

Velvet King. Red. Per doz., 80c.; per 100, \$6.00.

Klondike. Yellow. Per doz., 65c.; per 100, \$4.50.

Groff's Hybrid. Mixed. Per doz., 35c.; per 100, \$2.50.

Superfine Mixed. Per doz., 60c.; per 100, \$4.00.

CALADIUM ESCULENTUM.

Eight to ten inches in circumference. Each, 10c.; per doz., \$1.00.

MADERIA VINE.

Each, 5c.; per doz., 50c.

GLOXINIAS.

Mixed Varieties.

Caladium and dahlias ordered by mail are subject to an extra charge of ten cents per dozen for postage.
All other bulbs ordered by mail are subject to an extra charge of five cents per dozen for postage.

TUBEROUS BEGONIAS.

The tuberous-rooted begonias are among the handsomest of summer-flowering bulbs, as they bloom continuously throughout the summer.

Single.

Scarlet
Orange
Crimson

Pink
White
Yellow

Double.

Scarlet
Orange
Crimson

Pink
White
Yellow

Price on application.

TUBEROSE.

Large bulbs. Each, 8c.; per doz., 75c.; per 100, \$5.50.

LAWRENCE DAHLIAS.

Direct from the growers at Elmwood Dahlia Farm.

Selected for variety of color, and for form, size and perfection of bloom. All bulbs mossed and started, and ready for early flowering. Stock for shipment, May 15th to June 1st. Each, 20c.; per dozen, \$1.75.



TULIP.

DUTCH BULBS.

FOR WINTER AND SPRING BLOOMING.

To the lover of flowers there are few prized as those which are produced from bulbs. The reason is easily found. Within the bulbs are stored all the future glory of leaves and flowers, only requiring the simplest culture to develop them in their highest perfection, and with no other material can be secured such a wealth of charming flowers of infinite variety of form and coloring, with so little trouble and at so small an outlay. Our sources of supply are the best, the leading growers having for years supplied us with their choicest stock, and we solicit your patronage. Special prices to florists, and those ordering large quantities.

Write for Bulb Catalog—Ready about September 1st.

VEGETABLE PLANTS.

CELERY PLANTS—Ready June 1st to 15th.

Golden Self-Blanching, White Plume.
Boston Market,

TOMATO PLANTS—Ready May 15th to 20th.

Earliana, Dwarf Champion,
Red Cross, Favorite,
Scarlet Globe, Perfection,
Table Queen, Bonny Best,
and other standard varieties.

One dozen in each box.

CABBAGE PLANTS.

Early Summer Varieties. Ready May 15th to 20th.
For Winter Crop. Ready June 15th to 20th.

CAULIFLOWER PLANTS.

Ready May 15th to 20th.

RHUBARB ROOTS AND ASPARAGUS ROOTS.

Ready in April.

Prices subject to change without notice. (See note on page 2.)



A GENERAL LIST OF *Vegetable Seeds*

We forward seeds by **Mail, Express or Freight** as the purchaser may wish. When ordered by mail, add postage for beans, corn and peas at the rate of six cents per pound to catalog prices, and for larger shipments by mail, see Parcel Post rates on page 2 of cover.

ASPARAGUS.

Sow early in May, thinly, in rows one inch deep and two feet apart. The next season plant in drills two inches deep and two feet apart, spreading the roots well out in ground thoroughly manured and trenched, at least two feet deep.

One ounce will produce about 200 plants; 4 to 5 pounds to the acre.

Early Giant Argenteuil. Pkt. Oz. ¼ lb.

This variety has thus far been free from rust; valuable on account of earliness; produces an even growth, is of large size and superb flavor

.05 .20 .75

Conover's Colossal.

Large and productive; a very desirable variety

.05 .20 .75

Palmetto. Early, prolific and uniformly of large growth

.05 .20 .75

Conover's Colossal Roots. Two years old, per 100, \$1.50.



ASPARAGUS.

BEANS—Dwarf or Bush.

A succession of sowings can be made from the first week in May until August. Plant in drills about two inches deep, and from eighteen inches to two feet apart, according to the richness of the soil; the poorer the soil the closer they can be planted; the plants should be about three inches apart.

Two pounds are sufficient for 100 feet of drill; 90 pounds for one acre in drills.

Beans ordered by mail are subject to an extra charge of six cents per pound for postage. For larger shipments by mail, see rates on page 2 of cover.

Green-Podded Varieties.

Broad Windsor. (English Beans.) Plant as early in the spring as the ground can be worked, from two to four inches apart, in drills from twenty-four to thirty inches apart. As soon as the plants are in full blossom, and the lower pods begin to set, pinch off the tops; this will insure the filling of the pods and hasten the maturity of the seed

1 lb. 2 lbs. 8 lbs.

.35 .65

Burpee's Bush Lima. The only bush form of the true large Lima bean. The plants grow eighteen to twenty inches high. Is an immense yielder of handsome, large pods, well filled with very large beans, which are identical in size and luscious flavor to the well-known large pole Lima

.35 .65

Burpee's Stringless Green Pod. Very early. Pods four and a half to five and a half inches long, nearly round, slightly curved, light green in color, flesh tender, and of the best quality

.35 .65 \$2.50

Bountiful. Early market variety. Pods grow to large size, are broad and fleshy, cook tender and fine quality

.35 .65 2.50

Prices subject to change without notice. (See note on page 2.)

BEANS—Continued.

Dwarf Horticultural. Pods of medium length, slightly curved, and when nearly developed are freely splashed with bright red on the yellow skin. The green shell beans are of good size, tender and of fine flavor.

1 lb.	2 lbs.	8 lbs.
.40	.75	\$2.75

Goddard, or Boston Favorite. A larger, later Dwarf Horticultural type.

1 lb.	2 lbs.	8 lbs.
.35	.65	\$2.50

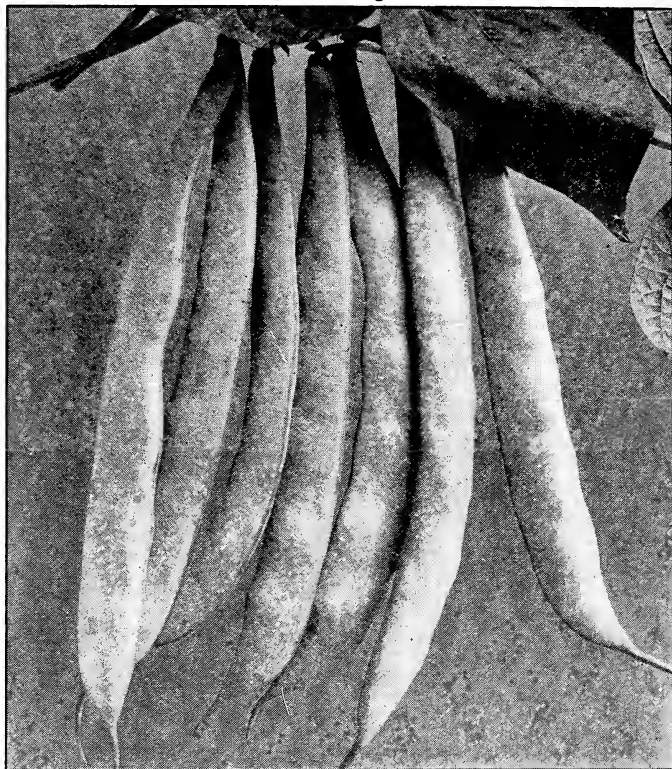
Low's Champion. Early, hardy, thrifty and enormously productive; combines extreme tenderness and delicious flavor, being absolutely without strings to the pods, and excels many other varieties as a snap or string bean. As a shell bean it has but few equals, and is of splendid flavor when cooked dry.

1 lb.	2 lbs.	8 lbs.
.35	.60	\$2.25

Long Yellow Six Weeks.

Early, pods long, flat and full. Mostly grown for market.

1 lb.	2 lbs.	8 lbs.
.35	.65	\$2.50

**GREEN PODDED BUSH BEANS.**

Improved Refugee. (1000 to 1.) Of true bush growth, fifteen inches in height, branching freely. The pods are nearly round, light green, five inches long, tapering to a slender point; extremely prolific.

1 lb.	2 lbs.	8 lbs.
.40	.75	\$2.75

Red Valentine. The pods are very fleshy, round and saddle-backed, with only slight strings. Bushes grow uniformly about fifteen inches in height and produce a large crop.

1 lb.	2 lbs.	8 lbs.
.40	.75	\$2.50

Wax or Yellow-Podded Varieties.

Brittle Wax. One of the earliest wax beans. Pods fleshy, entirely stringless, and of fine quality. Very hardy and prolific.

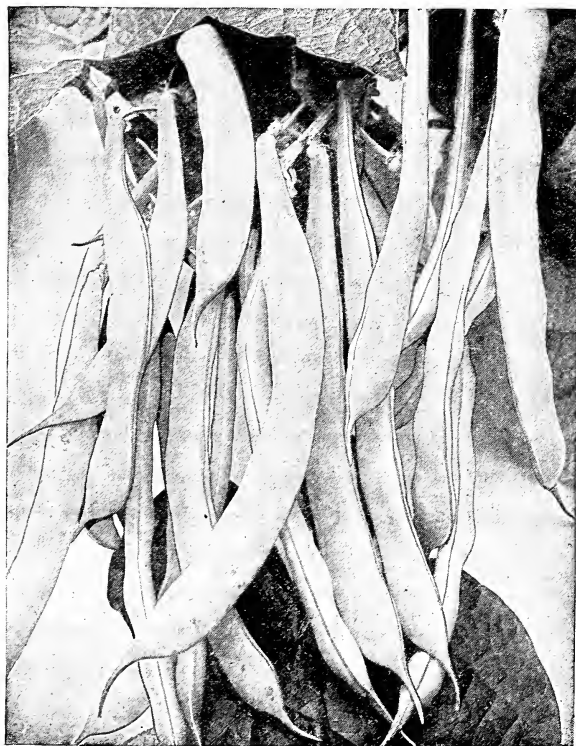
1 lb.	2 lbs.	8 lbs.
.40	.75	\$2.75

Black Wax. Pods yellow; a superior snap bean.

1 lb.	2 lbs.	8 lbs.
.40	.75	\$2.75

Currie's Rust-Proof Wax. Pods long, flat, tender and of fine quality.

1 lb.	2 lbs.	8 lbs.
.40	.70	\$2.60

**WAX PODDED BUSH BEANS.**

Prices subject to change without notice. (See note on page 2.)

BEANS—Continued.

Golden Wax, Improved. A medium early and heavy cropper, on vines of vigorous, bushy growth. The pods are golden yellow, fleshy and solid, brittle, wavy texture; excellent for home and market garden.	1 lb.	2 lbs.	8 lbs.
	.40	.70	\$2.60
Golden Wax, Keeney's Rustless. A superior market garden variety. Large, flat, golden yellow and very fleshy pod. It has an excellent flavor and shows almost no tendency to rust.	.40	.70	2.60
Hardy Wax. Vines are of strong, vigorous growth, producing a heavy crop of long, handsome yellow pods; of excellent quality, and is very prolific.	.40	.75	2.75
Sure-Crop Stringless Wax. A valuable variety, which, while not related to the well-known Currie's Rust-proof Wax, bears a great resemblance to it in plant, pod and bean, but is of much better quality. The plant is strong and holds the pods well off the ground and it will stand long seasons of wet weather.	.40	.75	2.75
Wardwell's Kidney Wax. Hardy and vigorous vine, producing a heavy crop of handsome, yellow pods, stringless and brittle. Beans large, kidney shaped.	.40	.75	2.75
White Wax. Pods and seeds white and of rich flavor.	.40	.75	2.75

Field Varieties.

Jacob Cattle. One of the most prolific field beans in cultivation and of very fine quality for baking.	1 lb.	2 lbs.
	.25	.45
Kidney, Red. Excellent as a shell bean and for baking.	.25	.45
Kidney, White. Seed white, smaller than the red variety. Very prolific; fine for baking.	.25	.45
Snowflake Pea. A decided improvement on the common pea bean. Productive and very early.	.20	.35
Soldier. Considered the earliest of field beans and very popular.	.25	.45
Sulphur Pea. Larger than the white pea bean; golden yellow color; early and of fine quality.	.20	.35
Yellow Eye. (Improved.) Heavy yielder; fine quality.	.20	.35
Yellow Eye. (Old-fashioned type.) Very prolific; fine for baking.	.20	.35

BEANS—Pole or Running.

The planting of the various sorts of pole beans should be delayed a week or more after the first planting of the early dwarf sorts. They succeed best in sandy loam, which should be liberally enriched with short manure in the hills, which are formed, according to the variety, from three to four feet apart; from five to six seeds are planted in each hill, about two inches deep.

Two pounds will plant 150 hills; 20 to 24 pounds to the acre.

Golden Cluster Wax. One of the leading wax pole beans. Fine either as a snap or shell bean.	1 lb.	2 lbs.	8 lbs.
	.35	.65	\$2.50
Kentucky Wonder. Very productive, and of fine quality. Entirely stringless pods, of a silvery green color.	.35	.65	2.50
Kentucky Wonder Wax. Similar to the Kentucky Wonder, with long, thick, golden yellow pods.	.40	.75	2.75
King Horticultural. An early, robust grower, the pods being large, stringless, and bright carmine. Tender and of delicious flavor.	.35	.65	2.50
Lazy Wife's. Abundantly productive, and of excellent flavor, with long, green, fleshy and stringless pods.	.35	.65	2.50
Lima, Large. A large, late variety of excellent flavor.	.40	.75	2.75
Lima, Small. Earlier and hardier than the preceding.	.40	.75	2.75
London Horticultural. An old favorite. Very productive and excellent as a snap or shell bean.	.35	.65	2.50
White Case Knife. Good green-podded variety.	.40	.75	2.75

ALL BEANS—INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA.

BEET.

The best results are obtained on a deep, rich, sandy loam. For early use sow as soon as the ground will admit, in drills fourteen inches apart, and thin to four inches; for the main crop, sow the first week in May, and for winter use as late as June. The soil should be deeply manured and well cultivated. In lifting and storing the roots, care must be taken that they are not bruised.

One ounce to 50 feet of drill; 6 pounds to the acre.

CRIMSON GLOBE. A second early variety, remarkable for its smooth skin and fine shape.	Pkt.	Oz.	¼ lb.	Lb.
	.05	.20	.50	\$1.50
Crosby's Egyptian. As early as the Egyptian, shape more round, flesh sweet and tender.	.05	.20	.50	1.50
DETROIT DARK RED. Similar in shape to the Dewing's, of dark red color, with small tops. A favorite with market gardeners.	.05	.20	.50	1.50
Dewing's Blood Turnip. Of fine form and flavor, blood red. A desirable variety.	.05	.20	.50	1.50

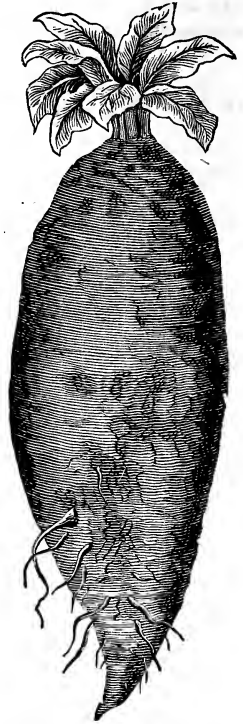
Prices subject to change without notice. (See note on page 2.)

BEET—Continued.

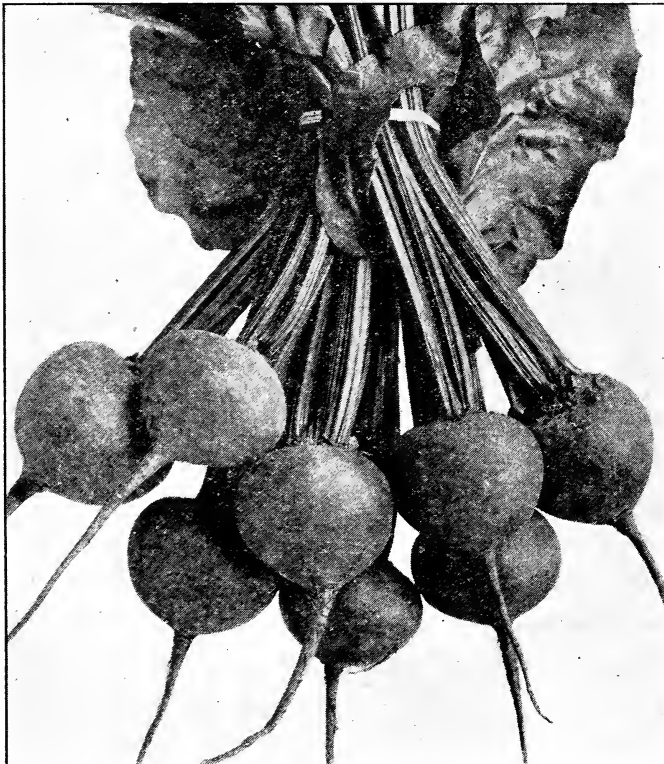
	Pkt.	Oz.	¼ lb.	Lb.
Dirigo Extra Early. A rich, blood-red beet of fine grain and flavor, earlier than the Egyptian or the Eclipse .....	.05	.20	.50	\$1.50
Early Wonder. A popular variety among market gardeners. It matures very rapidly and is so uniform in growth that the crop can be lifted practically at one time.....	.10	.20	.60	2.00
Eclipse. This variety is about as early as the Egyptian, but larger and of finer quality; color, dark crimson .....	.05	.20	.50	1.50
Edmand's Early Turnip. A variety of handsome round shape. The skin is deep blood red in color, the flesh very dark and exceedingly sweet and tender in quality .....	.05	.20	.50	1.50
Egyptian Blood Turnip. Very early and of rapid growth; color, deep crimson; of excellent quality.....	.05	.20	.50	1.50
Swiss Chard (Lucullus). The leaves of Swiss chard are used as greens, cooked in the same manner as spinach, and the large ribs are prepared like asparagus, in which manner they are delicious. The "Lucullus" is the largest and best variety of Swiss chard.....	.05	.15	.45	1.50

Varieties grown for feeding stock. Sow in May or June—5 pounds per acre.

	Pkt.	¼ lb.	Lb.
Allen's Mammoth Long Red Mangel Wurzel. A variety producing roots of mammoth size.....	.05	.30	\$1.00
Golden Tankard Mangel Wurzel. Bright yellow; very productive .....	.05	.30	1.00
Norbiton Giant Mangel Wurzel. Extra fine long red; very large.....	.05	.30	1.00
Sludstrup Mangel Wurzel. A Danish variety, richer in food value than other sorts. Roots are large, heavy and easy to harvest.....	.05	.30	1.00
Yellow Globe Mangel Wurzel. Roots of large size and globular form; very productive .....	.05	.30	1.00
Lane's Imperial Sugar. A greatly improved variety of the White French Sugar .....	.05	.30	1.00
White French Sugar. Largely cultivated for feeding stock.....	.05	.30	1.00



ALLEN'S MAMMOTH
LONG RED MANGEL
WURZEL.



DETROIT DARK RED BEET.

BROCCOLI.

Broccoli is nearly allied to the cauliflower, and may be regarded as a variety of that delicious vegetable. It is hardy and sure to head, but inferior in flavor.

One ounce of seed will produce about 2,000 plants.

	Pkt.	Oz.
Purple Cape. Heads greenish purple; medium size and compact..	.10	.60
White Cape. Large, creamy-white; sure to head; standard sort...	.10	.60

BRUSSELS
SPROUTS.

A species of the cabbage family, producing along the stem small sprouts like little cabbages. Grown in the same manner as winter cabbage.

One ounce will produce about 2,500 plants.

	Pkt.	Oz.	¼ lb.
Improved Long Island. A variety of excellent quality.....	.05	.50	\$1.50

Prices subject to change without notice. (See note on page 2.)

CABBAGE.



The cabbage is one of the most important vegetables, and some of its varieties are universally cultivated. The ground must be highly manured, deeply dug or ploughed, and thoroughly worked, to insure good, full-sized heads. A heavy, moist and fresh loam is the most suitable. The early sorts should be sown very early in the spring, in hotbeds, or later in the open ground. Eighteen inches by three feet apart is the common distance.

One ounce will produce about 3,000 plants; 4 to 5 ounces to the acre.

	Pkt.	Oz.	¼ lb.
All Seasons. Larger than Henderson's Early Summer, nearly as early; very solid and sure heading.....	.10	.35	\$1.25
Charleston Wakefield. Resembles the Jersey Wakefield, heads larger and more uniform.....	.10	.40	1.50
Columbia. Very early and compact. Is hardy and vigorous; produces splendid solid heads, of marketable size, and is recommended as one of the most desirable summer varieties.....	.10	.35	1.25
COPENHAGEN MARKET. One of the best large, round head, early cabbages in cultivation, the type being thoroughly fixed and nearly all the heads maturing at the same time. The plant is short-stemmed; heads set near the ground, are very solid, with a small core, and of fine quality. One of the very best early cabbages for market gardeners.....	.10	.40	1.50
Danish Ball Head. (Imported.) Heads round and solid. A good winter variety..	.10	.40	1.50
DANISH BALL HEAD. (Cape Elizabeth grown.) A valuable, round, solid winter variety. Is a long keeper, and profitable for shipping, keeping long after other sorts have gone.....	.10	.60	2.25
DANISH EARLY SUMMER. The heads of this cabbage are of a splendid shape and ready early in the season. It is very early, large, firm and heavy.....	.10	.35	1.25
Early Jersey Wakefield. A standard early variety for home use or market.....	.10	.35	1.25
Early Winningstadt. An excellent sort; heads of large size.....	.10	.35	1.25
Fottler's Improved Brunswick. An excellent early Drumhead variety; produces a firm and solid head.....	.10	.35	1.25
Henderson's Early Summer. One of the earliest of large cabbages, coming in but a few days later than the Wakefield; heads of large size, very solid and compact.....	.10	.35	1.25
Henderson's Succession. An excellent second early or late sort.....	.10	.35	1.25
Improved American Savoy. Very sweet and tender; good-sized, firm heads; very reliable and much esteemed for family use.....	.10	.35	1.25
Marblehead Mammoth Drumhead. The largest variety of Drumheads.....	.10	.40	1.50
Mammoth Red Rock. Used almost exclusively for pickling.....	.10	.35	1.25
Pe-Tsai (Chinese Cabbage). Grows similar to Cos lettuce.....	.10	.35	1.25
Premium Flat Dutch. A standard late variety.....	.10	.35	1.25
Stone-Mason Drumhead. One of the best for a main crop.....	.10	.40	1.50

Prices subject to change without notice. (See note on page 2.)

CARROT.

Carrots require a very finely pulverized soil to grow them to perfection. A good, light and well-enriched sandy loam is the best for this crop. For field culture, sow in drills, three to three and one-half feet apart, and for table use sow the smaller varieties in rows sixteen to eighteen inches apart. For early crops, cover one-half an inch deep, and thin to three inches apart in the rows; for late, cover three-fourths of an inch deep, and thin to four inches.

One ounce to 100 feet of drill; 3 to 4 pounds to the acre.

Chantenay. A choice variety; longer than the Scarlet Horn, and a little broader at the top..... .05 .20 .65 \$2.00

Danver's Half Long. In form it is midway between the Long Orange and Scarlet Horn. The root is of a rich, dark orange color and grows very smooth. Very productive and keeps well..... .05 .20 .60 2.00

Early French Forcing. The earliest variety; valuable for forcing..... .05 .20 .65 2.00

EARLY MARKET. A thick, stump-rooted early variety of brilliant color, broad at the top, gradually getting smaller towards the root, which is blunt. An excellent market sort..... .05 .20 .65 2.00

Early Scarlet Horn. Fine grain, medium size. An excellent table sort..... .05 .20 .65 2.00

Improved Long Orange. The best late variety. Roots of large size, heavy crop- per; an excellent keeper..... .05 .15 .50 1.50

Large White Belgian. Large, long-rooted variety; valuable for feeding stock.... .05 .15 .50 1.50

Nantes. Early, roots almost cylindrical, very smooth and grows about six inches long; the flesh is entirely red, very sweet, and almost entirely without a core..... .05 .20 .65 2.00

Oxheart. Very thick and short, fine grained and sweet..... .05 .20 .60 2.00



DANVER'S HALF LONG CARROT.

CAULIFLOWER.

Any soil that will grow early cabbages will grow cauliflower, as their requirements are almost similar, but as the product is more valuable, extra manuring and preparation of the soil will be well repaid. The seeds may be sown in the hotbed in March or April, and transplanted to open ground about the first of May.

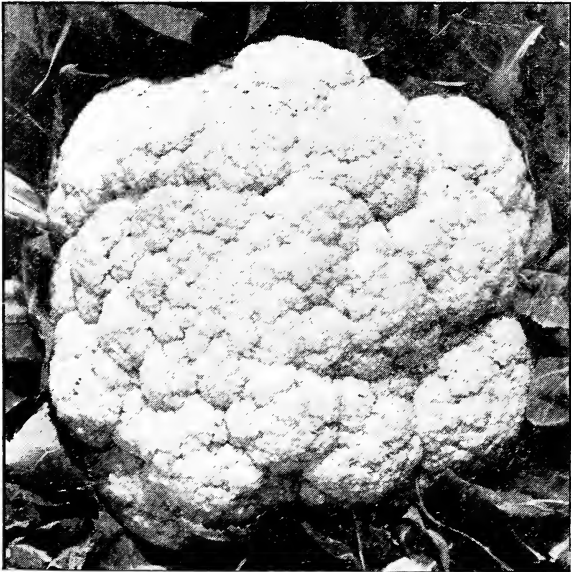
One ounce will produce about 2,500 plants.

Carter's Autumn Giant. A large, late variety..... .10 \$1.00

Extra Early Dwarf Erfurt. The earliest variety; large, compact heads, of fine quality..... .15 2.50

GILT EDGE. Large, heavy sort; one of the best and surest of all the sorts now in cultivation..... .15 2.75

Henderson's Early Snowball. One of the best early sorts. Very reliable and grown largely for the market..... .15 2.50



GILT EDGE CAULIFLOWER.

Prices subject to change without notice. (See note on page 2.)



GOLDEN SELF-BLANCHING CELERY.

CELERY.

To have celery early it should be sown in a hotbed, quite early in the spring, and when three inches high plant out in a well-prepared bed, which must be covered in frosty weather. For the principal crop sow early in the spring, very shallow in the seed bed, and when the plants are about six inches high transplant them six inches apart into trenches for blanching. Dig the trenches four feet apart, a foot wide and ten inches deep. Fill in five or six inches of well-rotted manure, and mix thoroughly half a spade deep with the earth at the bottom. The tops of the plants should be shortened before they are set. Earth up to blanch three or four times during their growth, taking care that no earth falls in the center of the plant.

One ounce of seed produces about 4,000 plants.

	Pkt.	Oz.	¼ lb.
Boston Market. A favorite variety, remarkable for its tender, crisp and succulent stems, and its peculiarly mild flavor; keeps well10	.45	\$1.50

Giant Pascal. An easily blanched variety; superior for late use10	.45	1.50
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GOLDEN SELF-BLANCHING. A fine, solid variety of a beautiful waxy, golden color; very thick stalks of excellent flavor; growth close, compact and of medium height.....	.10	.50	1.50
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Henderson's White Plume. Crisp, solid and possessing a sweet, nutty flavor; requires very little labor in blanching. Very early and handsome.10	.25	.60
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Winter Queen. An excellent winter keeper, recommended especially to market gardeners. Grows a thick stalk and has a large heart. The color is creamy-white and very attractive10	.45	1.50
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Soup Celery. (Not for sowing.) Used for flavoring pickles, soups, etc.....	.05	.10	.30
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CHARD—Swiss (or Spinach Beet).

Swiss chard is sometimes called Sea Kale Beet. After once having used Swiss chard for greens we believe your garden will always have at least a row of it, for it is delicious. The leaves are used as greens, and served like spinach. The mid-ribs may be cooked like asparagus. Cuttings may be made all summer, as it can be cut down to the ground and new shoots will soon spring up and make fast growth.

Lucullus. Largest and best variety05	.15	.45	\$1.50
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CHERVIL.

Curled Chervil. An aromatic sweet herb. The young leaves are used in soups and salads. Sow thinly in May, in drills half an inch deep, one foot apart05	.25	.85
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CHICORY.

One ounce to 100 feet of drill.

Large Rooted. Used to mix with or as a substitute for coffee. The roots are taken up, washed, cut in small pieces and carefully dried before being used. Cultivation same as the carrot05	.35	\$1.25
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CORN—Sweet.

The sweet or sugar varieties, being liable to rot in cold, wet ground, should not be planted before the middle of May, and for a succession continue planting every two weeks until July, in rich, well manured ground, in hills three feet apart each way, covering about an inch, and thin out to three plants to a hill, or plant in rows four feet apart, and to stand eight inches apart in the rows.

One pound to 125 hills; 20 pounds to the acre.

Corn ordered by mail is subject to an extra charge of six cents per pound for postage. For larger shipments by mail, see rates on page 2 of cover.

Prices subject to change without notice. (See note on page 2.)

CORN—Continued.

Early Varieties.

Pkt. 1 lb. 2 lbs. 12½ lbs.

"K. & W." EARLY HONEY-SUCKLE. The earliest variety yet produced, being very tender and delicious. One of the best for early market

.10 .30 .55 \$3.00

EARLY MAYFLOWER. A very early variety, being from seven to ten days earlier than the Cory. Is a perfectly white corn, eight, ten and twelve rowed, very productive, and for so early a variety is of excellent quality

.10 .25 .45 2.60

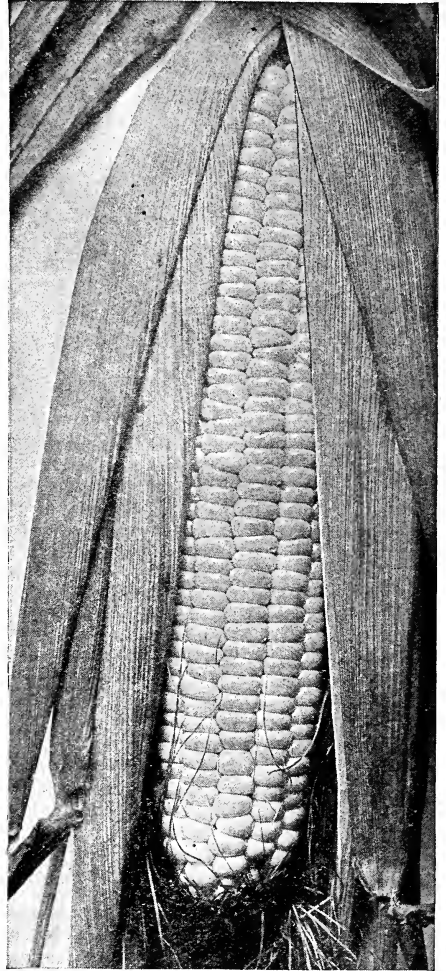
Early Crosby. An excellent early variety. The ears are five to six inches long and the grains are white, sweet and tender

.10 .25 .45 2.60

Early White Mexican. As sweet and delicious as Black Mexican, handsome in appearance and as early as White Cory. Stalks four and one-half feet high. Ears eight inches long, usually eight rowed. Superior in quality to any early variety of equal size

.10 .25 .45 2.60

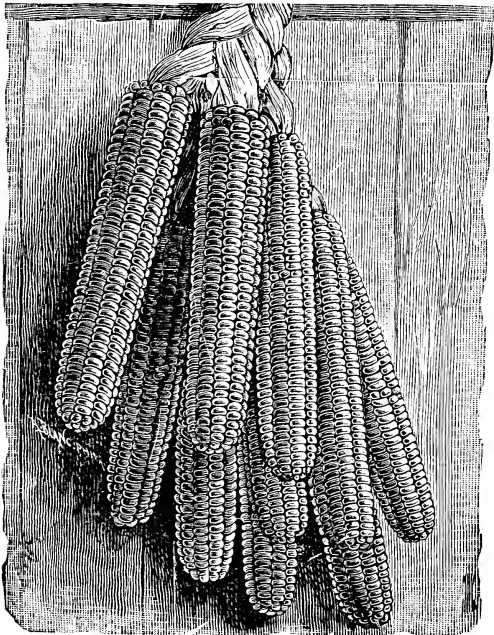
Golden Bantam. An early variety. The ears are medium size, but thickly set with delicious yellow kernels. The quality of this variety is superb, and it has



GOLDEN BANTAM SWEET CORN.

become a general favorite sweet corn with all who have tried it. Golden Bantam has a flavor distinct from other sorts, and if you have never tried it in your garden you should plant it this year. Never mind if the color is yellow, the rich nut quality is there

.10 .25 .45 2.60



EARLY YELLOW FIELD CORN.

Mammoth White Cory. The ears are very large for so early a variety. The stalks are about four feet high, each generally bearing two large, finely shaped ears which become fit for use as early as those of any variety. They are twelve rowed, six to seven inches long, very symmetrical and handsome. The grain is large, broad, very white and of remarkably good quality for such an early sort

.10 .25 .45 2.60

Prices subject to change without notice. (See note on page 2.)

CORN—Continued.

Medium and Late Varieties.

	Pkt.	1 lb.	2 lbs.	12½ lbs.
Country Gentleman. Medium early and productive .....	.10	.25	.45	\$2.60
Potter's Excelsior. Twelve rowed, very sweet and tender.....	.10	.20	.35	2.25
Seymour's Sweet-Orange. Is a most desirable second early or mid-season variety, growing vigorously from five to six feet in height, and producing an average of two good ears to a stalk. The ears are ready for use a few days later than those of Golden Bantam, and are from six to seven inches in length, with twelve to fourteen rows of deep, rather slender grains of a light canary yellow.....	.10	.25	.45	2.60
Stowell's Evergreen. A late variety of excellent quality, remaining longer in the green state than any other kind.....	.10	.20	.35	2.00

FIELD AND ENSILAGE CORN.

(56 pounds to the bushel.)

	1 lb.	2 lbs.	14 lbs.
Early Yellow Canada. The variety most widely grown in northern New England. An early eight-rowed flint corn with handsome ears and comparatively small cobs, filled to the tips with large, broad kernels.....	.15	.25	\$1.75
Longfellow. A fine field variety, similar to Yellow Canada, having very long ears, small cob and large kernel.....	.15	.25	1.50
Eureka (Ensilage). One of the tallest and best varieties of ensilage corn, producing a large amount of fodder to the acre	Price quoted on applica- tion.		
Improved Leaming (Ensilage). An early, very productive variety. One of the best for ensilage; profitable as a green fodder.....			
Red Cob (Ensilage). A pure white corn. Is tender and juicy, has short joints, and grows to a great height, with an abundance of leaves.....			
Early Sanford (Ensilage). Very early; ears white; excellent for fodder and ensilage.....			

CRESS (Peppergrass).

A well-known salad. Requires to be sown thickly and covered very slightly. Sow at frequent intervals to keep up a succession, as it soon runs to seed.

One ounce will sow about 100 feet of drill.

	Pkt.	Oz.	¼ lb.
Extra Curled. Very fine; may be cut two or three times.....	.05	.15	.35
Water Cress. A hardy perennial aquatic plant, growing in water along the margins of streams .....	.10	.60	\$2.00

CUCUMBER.

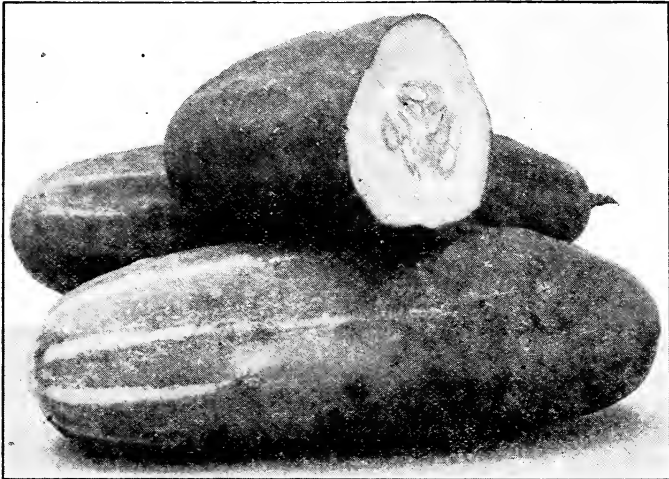
The cucumber is a tender annual, and therefore should not be planted or set out in the open air until there is a prospect of continued warm and pleasant weather. Cucumbers succeed best in warm, moist, rich, loamy ground. The hills should be four or five feet apart in each direction. When all danger from insects is passed, leave but three or four of the strongest plants in the hill.

One ounce to fifty hills; 2 pounds to the acre.

	Pk.	Oz.	¼ lb.	Lb.
ARLINGTON WHITE SPINE. (For forcing.) Is one of superior quality for forcing. Color dark green, with little of the white spine showing; is extra long. Fruit grows very even in size and regular in form. Equally good for outdoor planting....	.10	.20	.60	\$2.00
Boston Pickling. The finest variety to grow for pickles; yields large crops; short, straight and dark green .....	.05	.15	.50	1.50
Cumberland. A variety of the Improved White Spine type. Is a splendid table sort, and excellent for pickling. Color, deep green, with white tip; flesh firm; very crisp and tender.....	.05	.15	.50	1.50
DAVIS PERFECT. The cucumbers grow long and slim, sometimes measuring twelve inches in length. The color is a rich, dark, glossy green, which they hold until nearly ripe. Very tender and of fine flavor.....	.10	.20	.65	2.25

Prices subject to change without notice. (See note on page 2.)

CUCUMBER—Continued.



IMPROVED WHITE SPINE CUCUMBER.

- Improved White Spine.** Superior for table use; very productive; medium size, straight and well formed..... .05 .15 .50 \$1.50
- Japanese Climbing.** Quick, strong growing vines, which may be trained upon a trellis or poles. Fruit from twelve to sixteen inches in length, skin dark green, flesh pure white, crisp and of fine flavor..... .05 .15 .50 1.50
- Lemon.** A distinct type; nearly round, with the yellow and green markings and smooth skin of the lemon, while flesh is exceedingly tender, crisp and sweet10 .15 .50 1.50
- Long Green.** Long and crisp; a popular and reliable variety for pickling and table. .05 .15 .50 1.50
- Short Green.** Similar to Early Frame..... .05 .15 .50 1.50
- West India Gherkin.** Small, prickly variety; grown exclusively for pickling.10 .20 .60 2.00
- White Wonder.** A new variety. Very handsome, with ivory-white fruit..... .10 .20 .60 2.00

DANDELION.

A hardy perennial plant, with broad, thick leaves, affording one of the earliest as well as one of the most healthful of spring greens. Sow as early as the weather will permit, in good, well-enriched soil, in rows twelve inches apart, covering seed one-fourth of an inch deep, the earth firmly pressed over the seed.

One ounce to 150 feet of drill; 1 pound will sow an acre.

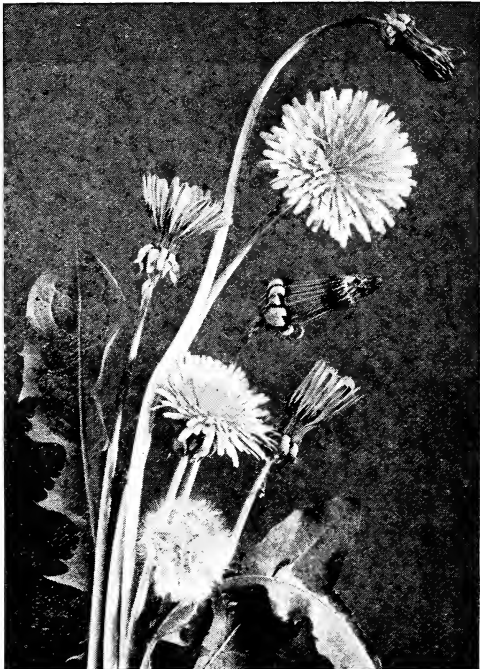
- | | Pkt. | Oz. | ¼ lb. |
|--|------|-----|--------|
| Improved French Thick-Leaved. The best variety | .10 | .80 | \$3.00 |

EGG PLANT.

The egg plant will thrive well in any good garden soil. Sow in the hotbed and when two or three inches high prick out into pots, or rows two and one-half to three inches apart. When the weather will permit, transplant into good, rich soil, thirty inches apart each way.

One ounce will produce 1,000 plants.

- | | Pkt. | Oz. |
|--|------|-----|
| Early Long Purple. Earliest and hardiest; very productive. Fruit long and of good quality; six to ten inches long. | .10 | .65 |
| New York Improved Large Purple. Most popular variety. The fruit is large, nearly round, dark purple and of excellent quality..... | .10 | .65 |
| Pearl. White; choice for ornamental work..... | .10 | .65 |



DANDELION.

Prices subject to change without notice. (See note on page 2.)



ENDIVE.

ENDIVE.

For early use, sow in May, scattering the seed thinly in drills ten inches apart, covering it lightly, and for a succession, every two or three weeks until midsummer. The plants must be blanched before using, which is accomplished by gathering the large outer leaves to a point at the top, and tying them together.

One ounce will sow 150 feet of drill.

	Pkt.	Oz.	¼ lb.
Broad-Leaved Batavian. (Escarolle.) Variety having wide, thick leaves, straight at the edges and curved toward the center. Color, dull green.	.05	.20	.65
Green Curled. Has very curly leaves, the outer edges being much indented and crested. An attractive plant and one of the best varieties .....	.05	.20	.65
White Curled. A light yellowish green variety; very curly and quite ornamental .....	.05	.20	.65

KALE (Borécole).

Sow early in May in a prepared bed, covering the seed lightly. Transplant in June, in rows three feet apart and two feet apart in row, and treat in the same manner as for cabbage. Kale is improved by a little frost, giving it a more delicate flavor.

One ounce to 150 feet of drill.

Green Curled Scotch. A round, dwarf variety, rarely exceeding eighteen inches in height, but spreading out under good cultivation to three feet in diameter05	.25	.85
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KOHL-RABI (Turnip-rooted Cabbage).

A vegetable intermediate between the cabbage and turnip. The edible part, the bulb, grows on a stalk a few inches above the ground. It is best cultivated by sowing the seeds in rows in May, June and July, according to latitude.

One ounce will sow about 200 feet of drill.

Early Purple. Differing from the white only in color, being of a bluish purple.....	.05	.25	.85
Early White. Flesh white and tender. The best market sort.....	.05	.25	.85

LEEK.

The leek is very hardy and easily cultivated. It succeeds best in a light, well-enriched soil. Sow as early in the spring as practicable, in drills one inch deep and one foot apart. When six or eight inches high they may be transplanted in rows ten inches apart each way, as deep as possible, that the neck, being covered, may be blanched.

One ounce of seed to 150 feet of drill.

London Broad Flag. A large variety with broad leaves05	.30	.85
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MARTYNIA.

A strong-growing, hardy annual, with curious-shaped seed-pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance, and should be gathered when about half grown. Plant in May or June in rows two feet apart, making hills about a foot apart.

One ounce will plant 50 hills.

Martynia Probosidea. Best for pickling10	.40	\$1.25
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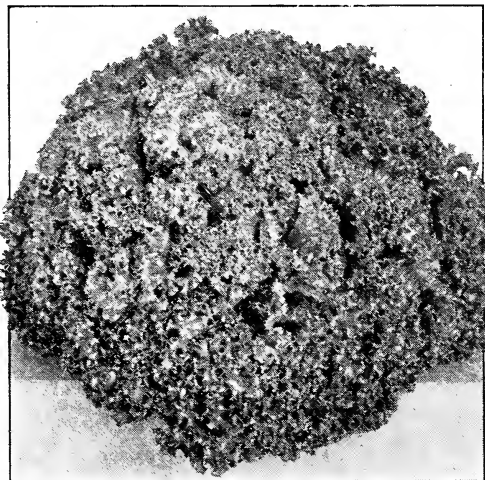
LETTUCE.

Lettuce thrives best in rich, moist ground. Sow the seeds in hotbeds in February or March, and transplant into a sheltered border with a southern exposure. For successive crops, sowing may be made in the open ground as early as spring opens, and continuing until July.

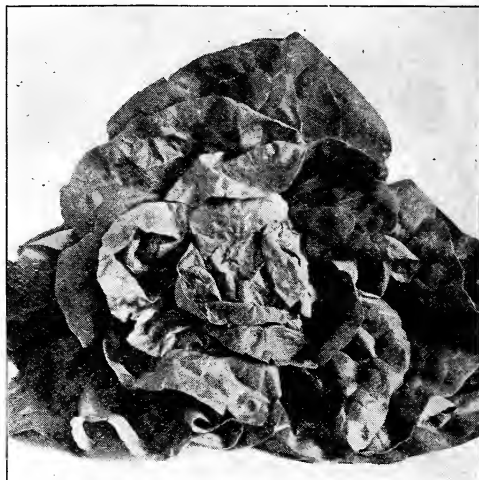
One ounce to 125 feet of drill.

Prices subject to change without notice. (See note on page 2.)

LETTUCE—Continued.



BOSTON CURLED LETTUCE.



TENNISBALL LETTUCE.

	Pkt.	Oz.	¼ lb.
Big Boston. Fine for forcing in cold frames, and for planting in the open ground.....	.05	.15	.40
Boston Curled. A variety of great beauty and of very superior quality. Leaves beautifully curled; attractive on table.....	.05	.15	.40
Brown Dutch. A large, hardy variety.....	.05	.15	.40
Deacon. Large and very solid heads, crisp and tender.....	.05	.15	.40
Defiance. Large, solid and crisp; stands the summer heat. ....	.05	.15	.40
Early Curled Silesia. Fine for summer use.....	.05	.15	.40
Giant Crystal Head. Outside leaves curled, with red edges; heads large and solid....	.05	.15	.40
Golden Queen. Medium sized; golden yellow heads, tender and crisp; a fine early head variety for forcing or open air culture.....	.05	.15	.40
Hanson. Heads very large, solid, tender, crisp and of fine flavor; color, beautiful green outside and white within.....	.05	.15	.40
Hittinger's Belmont Forcing. Larger than the white-Seeded Tennisball, nearly as early and of excellent quality; a choice strain for forcing.....	.10	.60	\$2.00
Iceberg. A large-heading variety; crisp and brittle, and color dark green, lightly tinged with brown on top of the head; leaves curled on the edges.....	.05	.15	.40
May King. Very early, large size and tender; heads bright green, with center leaves tinged with brown and with the hearts clear yellow.....	.05	.20	.75
Mignonette. Small, compact, creamy-yellow heads tinged outside with russet; of superior quality, sweet, crisp and tender, very early and hardy; excellent "all seasons" variety.....	.05	.15	.40
Prize Head. One of the very best loose-bunching or non-heading varieties. Color bright green tinged with brownish red; very curly and of remarkably fine flavor. Grows quickly and all except the outer row of leaves are very brittle. It is probably the most easily grown lettuce in cultivation.....	.05	.15	.40
Salamander. A fine summer lettuce. Is slow to run to seed, and will stand the drought and heat better than other varieties.....	.05	.15	.40
Tennisball, Black-Seeded. Popular for open air culture; heads compact, crisp and tender.....	.05	.15	.40
Victoria Cabbage. Hardy and fine for early sowing.....	.05	.15	.40
White Paris Cos (Romaine.) A sort with long, narrow, upright leaves; does not head, but when tied up blanches very easily.....	.05	.15	.40

MELON—Musk.

Melons thrive best in a moderately enriched, light soil. The hills should be six feet apart each way. After all danger of frost is past, plant twelve or fifteen seeds in each hill, and when well up, thin out to three or four plants.

One ounce to 60 hills; 2 to 3 pounds for an acre.

Prices subject to change without notice. (See note on page 2.)

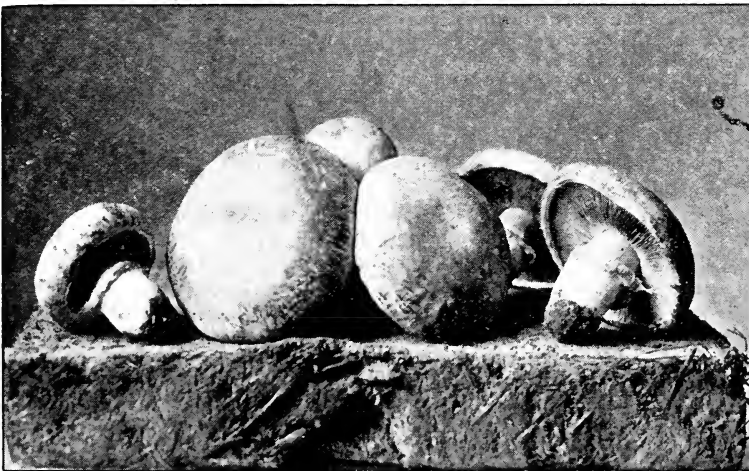
MELON—Continued.

	Pkt.	Oz.	¼ lb.
Banana. So called on account of its shape. The color is a delicate straw; flesh (the melon being nearly solid) a rich salmon. The flavor is delicious when the melons are thoroughly ripe. A fine early variety .....	.05	.15	.40
DELICIOUS GOLD LINED ROCKY FORD. Of a fine uniform shape, slightly oval; meat thick, green, and light gold toward center. A superior melon in flavor, and in every way .....	.10	.20	.75
Emerald Gem. Medium size; flesh rich salmon, of delicious flavor and superior quality; early and prolific .....	.05	.15	.40
Green Citron. Fruit medium size, deeply netted, shape nearly round, flesh green, and of rich, delicious flavor .....	.05	.15	.40
HONEY DEW. The delicious, honey-like flavor of this new melon met with instantaneous public favor and created a sensation wherever used. The fruit is good size, weighing eight to ten pounds; light colored, smooth skin; thick, light green flesh. ....	.10	.20	.75
Large Round Yellow Cantaloupe. Flesh reddish-orange, sweet and of good flavor; an early and productive variety .....	.05	.15	.40
Large Yellow Musk. A very large variety, deeply ribbed and thickly netted; flesh salmon-yellow, thick and sweet .....	.05	.15	.40
Montreal. Large, round netted; flesh thick and light green .....	.05	.15	.40
Rocky Ford. Flesh green; medium size; oval shaped .....	.05	.15	.40
Surprise. Very early; medium size; salmon colored; flesh of superior flavor .....	.05	.15	.40

MELON—Water.

Plant in hills eight feet apart and cultivate same as musk melon. One ounce for 30 hills; 4 or 5 pounds to the acre.

Black Spanish. Fruit of large size, almost round; skin dark green, flesh red .....	.05	.10	.35
Citron. The standard variety for preserves .....	.05	.10	.35
Cole's Early. An extra good variety for growing in the Northern States, as it matures early. Large heart, flesh of fine texture and good flavor; rind thin .....	.05	.15	.50
Mountain Sweet. An old and reliable sort; flesh red .....	.05	.10	.35
Phinney's Early. Productive, early and finely flavored; flesh red .....	.05	.10	.35

MUSHROOM SPAWN.**MUSHROOM.**

Mushrooms may be grown in a warm cellar or shed in winter, or in the open air in summer. Take partially dry, fresh horse manure and lay it in a heap to ferment; turn and mix it well every few days, and when well fermented, it may be made into a bed, mixing it well together and beating or treading it firmly. Use a thermometer to thrust into the bed, and note the temperature. When the heat has partially subsided, leaving a temperature of 70° to 80°, put in the spawn, which may be inserted in pieces the size of a walnut, about two inches deep and six inches apart. After about two weeks, cover with fresh soil about two inches deep and beat it down evenly and firmly. Finish off with a covering of clean straw or hay about a foot thick. If

the temperature is right, mushrooms will begin to come up in about six to eight weeks, and the bed will continue bearing for about a month. One pound of spawn is sufficient for a bed 2 x 6 feet.

English Spawn In bricks, per lb., 25 cts.; 6 lbs., \$1.25
By mail, add six cents per pound for postage, and for larger shipments by mail, see rates on page 2 of cover.

MUSTARD.

A pungent salad used with cress. The seed is used for flavoring pickles, etc. Sow in May thickly in rows and cut when two or three inches high. One ounce to 40 feet of drill.

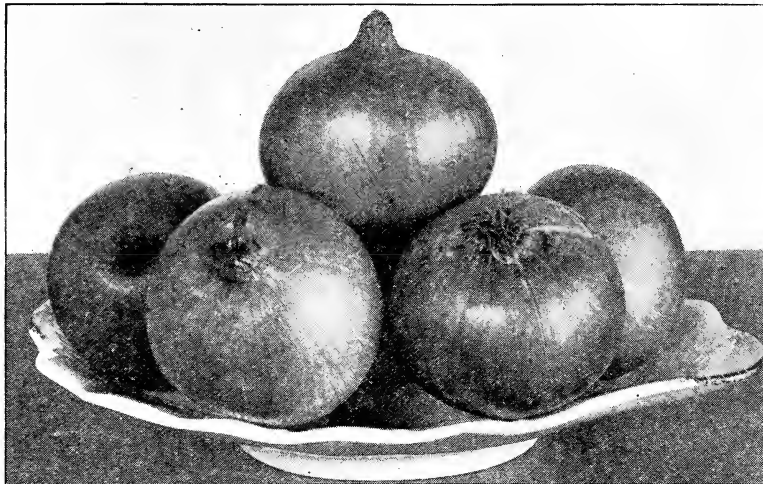
	Pkt.	Oz.	¼ lb.	Lb.
Brown. More pungent in flavor than the white .....	.05	.15	.40	\$1.25
White London. Mild flavor. Best for salads .....	.05	.15	.40	1.25

Prices subject to change without notice. (See note on page 2.)

OKRA (Gumbo).

Sow about the middle of May, when the ground is warm, in hills about three feet apart; cover seed one-half inch and thin plants to three in a hill. Keep ground well hoed and earth up around plants to support them. Gather pods while young and tender. Excellent for soups, stews, etc., to which they impart a rich flavor. *One ounce will sow 40 feet of drill.*

Improved Dwarf Green. An early dwarf and prolific variety, with thick green pods. Pkt. Oz. ¼ lb.
White Velvet. The plants are about three and one-half feet high, early maturing and very productive. The pods are white, long, smooth and are tender until nearly full size .05 .10 .30



YELLOW GLOBE DANVERS ONION.

ONION.

No vegetable is more extensively known and cultivated than the onion. A good crop is impossible unless the soil is very rich and kept clean. Use well-rotted manure freely, and get the crop in as soon as possible in the spring, no matter if the weather is cold and unpleasant. Sow in drills one foot apart and cover about one-third of an inch, treading or rolling after sowing, so that the hot, dry atmosphere may not dry up and destroy the sprouting seed.

One ounce to 100 feet of drill; 5 pounds to the acre.

Early Yellow Cracker. Flat, early onion, of mild and delicate flavor, and a good keeper	Pkt.	Oz.	¼ lb.	Lb.
.....	.10	.40	\$1.25	\$4.00
Extra Early Red Globe. Ten days earlier than the Wethersfield, of medium size and deep, rich color; an abundant producer and of good form and flavor, keeping well	.10	.35	1.00	3.50
"K. & W." YELLOW GLOBE DANVERS. Extra choice seed, grown from bulbs especially and carefully selected as to shape; the most popular of all the yellow onions for market and home use. A heavy cropper, good keeper, and of fine, mild, flavor. A profitable variety for market gardeners.	.10	.40	1.25	4.50
Large Red Wethersfield. Large size, productive and a good keeper.	.10	.35	1.00	3.50
New Queen. A silver-skinned variety, of quick growth and remarkable keeping qualities.	.10	.40	1.15	3.50
Prizetaker. Large, pale yellow skin; flesh white; mild flavor.	.10	.40	1.15	4.00
Southport, Red Globe. Flesh fine grain, mild and tender; matures quite early; good size	.10	.35	1.15	4.00
Southport, White Globe. Clear white skin, large, globe-shaped; heavy yielder and good keeper	.10	.40	1.50	5.00
Southport, Yellow Globe. A large, handsome, yellow variety; very productive, of mild flavor and a good keeper.	.10	.35	1.15	4.00
White Portugal. A mild and desirable summer variety, flat in shape, extensively grown for pickling	.10	.35	1.00	3.50
Yellow Globe Danvers. Grown from selected stock. A standard variety	.05	.30	.90	3.00

ONION SETS.

Onion sets should be planted near the surface as early in the spring as the ground will permit, in drills about twelve inches apart and four inches in the rows. They produce a very early and profitable crop, and grow in any good soil. *Add six cents per pound if sent by mail, and for larger shipments by mail, see rates on page 2 of cover.*

White Onion Sets. Ready in April. 1 lb. 8 lbs.
Yellow Onion Sets. Ready in April. .35 \$2.00
 .30 1.75

For larger quantities, prices will be given on application.

PARSLEY.

Parsley seed germinates very slowly, taking two to four weeks to come up; hence, if wanted early, no time should be lost by delaying the sowing. Make the rows twelve to fourteen inches apart. Thin to three or four inches apart, or transplant at this distance. Can be sown in hotbeds in February, or later in open ground. Late in autumn place glass frames over some of the plants to lengthen out the season of cutting. For garnishing purposes nothing equals parsley; it is also used in salads, soups, etc. Any good soil is suitable for growing this plant. *One ounce to 150 feet of drill.*

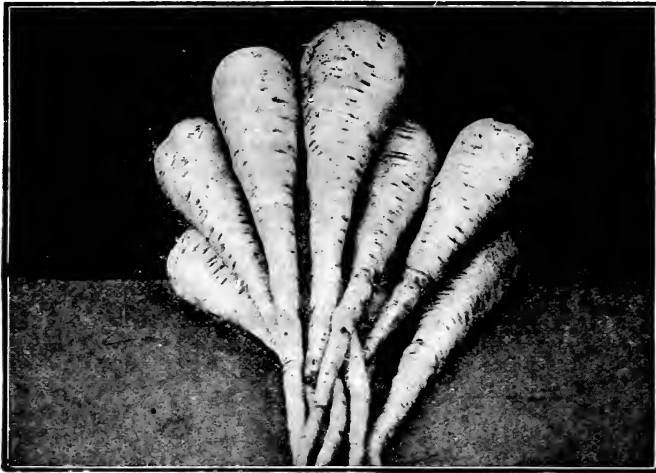
Extra Double Curled Pkt. Oz. ¼ lb.
Fern Leaved .05 .15 .45
 .05 .15 .45

Prices subject to change without notice. (See note on page 2.)

PARSNIP.

Sow as early in the spring as the weather will admit, in drills fifteen inches apart, covering half an inch deep. When well up thin out to five or six inches apart in rows. Unlike carrots, they are improved by frosts, and it is usual to take up in the fall a certain quantity for winter use, leaving the rest in the ground until spring, to be dug as required.

One ounce to 150 feet of drill; 5 pounds to the acre.



DON PARSNIP.

Abbott's Improved. Smooth and quite large; one of the best.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	\$1.50

Arlington Long White. Roots very long and smooth; one of the best for market gardeners.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	\$1.50

Hollow Crown. Roots very long, growing mostly below the surface of the ground.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	\$1.50

THE DON. A variety selected for handsome form, size, whiteness of skin and flesh, and solidity of texture. Specially recommended for market trade.

Pkt.	Oz.	¼ lb.	Lb.
.05	.15	.50	\$1.75

PEAS.

Peas, for an early crop, should be sown as soon as the ground is in working condition. The soil for their reception should be light, dry and well sheltered. Mild manure has a beneficial effect, but for many of the varieties the soil cannot be too rich. For general crops, the ground should be well manured the previous year, which causes them to yield more abundantly. When grown as a market crop, peas are never staked, and are sown in single rows, two or three inches deep, and from two to three feet apart, according to the variety or strength of the soil. When grown in small quantities for private use, they are generally sown in double rows six or eight inches apart, and the tall varieties staked up by brush.

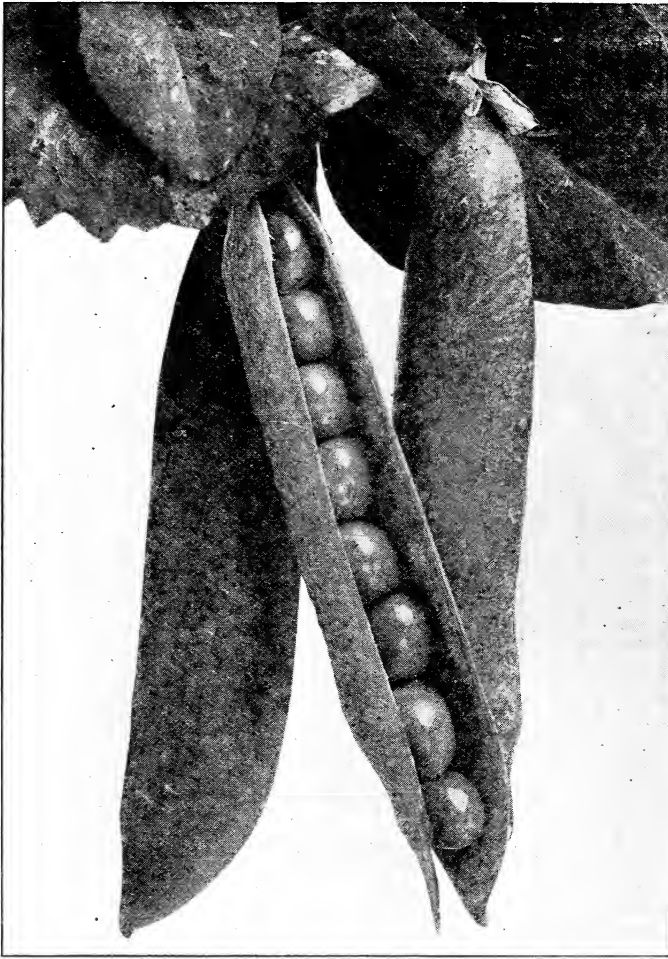
Two pounds will plant 75 to 100 feet of drill; from 84 to 112 pounds to the acre.

Peas ordered by mail are subject to an extra charge of six cents per pound for postage. For larger quantities by mail, see rates on page 2 of cover.

Extra Early.

	1 lb.	2 lbs.	14 lbs.
EARLY MORN. A variety of the Gradus type. The peas are large, closely packed in the pod, and of splendid flavor; 3 feet.....	.45	.85	\$5.70
GRADUS. One of the earliest large-podded peas. Produces healthy, vigorous vines two and one-half feet high, bearing well-developed pods containing peas of fine flavor. ...	.45	.85	5.70
LAXTONIAN. One of the earliest large, wrinkled peas. Vines are vigorous, growing about eighteen inches high; large, even sized, deep green pods, long and curved; peas of fine quality .....	.45	.85	5.70
LITTLE MARVEL. Extra early; similar to Nott's Excelsior. About fifteen inches high; dark green pods, often growing in pairs; very prolific. ....	.45	.85	5.70
MARVELOUS (New). Similar to Sutton's Excelsior, but a little earlier. Vines growing from twelve to fifteen inches in height, bearing pods closely filled with peas of finest quality.....	.45	.85	5.70
NOTT'S EXCELSIOR. Robust and vigorous in growth, producing handsome pods closely packed with large peas of fine flavor; height, 12 inches.....	.45	.85	5.70
SUTTON'S EXCELSIOR. Same habit of growth as Nott's Excelsior, bearing larger pods, filled with large peas, tender and of most delicious flavor and produced in great abundance.....	.45	.85	5.70
THOMAS LAXTON. One of the best early wrinkled varieties, resembling the Gradus; pods large, and well filled with peas of excellent flavor. Hardy and extremely productive .....	.45	.85	5.70
WORLD'S RECORD. A popular, large-podded, extra early, wrinkled pea. Its growth is quite similar to that of the Early Morn, but somewhat more dwarf; pods uniformly large, measuring four and one-half to five inches, nearly round and packed with handsome wrinkled peas of the finest flavor.....	.45	.85	5.70

Prices subject to change without notice. (See note on page 2.)



LAXTONIAN PEAS.

PEAS—Continued.

Second Early.

Bliss' Everbearing. Fine wrinkled variety; pods three to four inches long, well filled with large peas; 2 feet.

1 lb.	2 lbs.	14 lbs.
.40	.75	\$5.00

Dwarf Telephone. A choice variety with dwarf vines, bearing large, handsome pods, with peas of fine quality. Vine eighteen inches high, stocky, healthy and vigorous, with almost no tendency to sport.

1 lb.	2 lbs.	14 lbs.
.45 ^a	.80	\$5.50

General and Late Crop.

ADMIRAL DEWEY. Foliage, vine and pods rich, dark green. Healthy and vigorous, producing pods of large size, filled with peas of splendid flavor. One of the best of all long-vine, large-podded peas; height, 3 1-2 feet.

1 lb.	2 lbs.	14 lbs.
.45	.85	\$5.70

Carter's Quite Content. Pods longer and larger than any other second early variety. Vines and pods deep green, large peas of excellent flavor. Recommended for market gardeners; height, 3 to 4 feet.

1 lb.	2 lbs.	14 lbs.
.60	\$1.00	\$10.00

CARTER'S IMPROVED DARK GREEN PODDED TELEPHONE. An improvement on Carter's Telephone for PURITY and uniformity of HABIT, being true to name, showing no tendency to inferior pods, but bearing in great abundance LARGE, HANDSOME, FINELY FORMED PODS, from five to six inches in length. A superior wrinkled variety; height, 3 feet.....	1 lb.	2 lbs.	14 lbs.
	.45	.85	\$5.70
Champion of England. A well-known popular variety, unsurpassed in flavor, and very productive; 5 feet.....	.45	.80	5.50
Duke of Albany. Resembling Telephone in appearance; vine more dwarf; height, 2½ to 3 feet.....	.45	.85	5.70
Mammoth Podded Sugar (edible pods). Broad pods; cooked as string beans they are sweet and tender; height, 4 feet.....	.40	.75	
PRINCE EDWARD. A favorite of the extra large-podded varieties. Vines about four and one-half feet high. Pods are large, filled with enormous peas of tender, sweet and excellent flavor.....	.45	.85	5.70
PRODIGIOUS. A remarkably handsome, extremely large-podded variety, closely resembling the Dark Podded Telephone. Vines about five feet in height, covered with pods from four and one-half to five inches in length, filled with large peas of fine quality ...	.45	.85	5.70
Yorkshire Hero. A green, wrinkled variety, of branching habit and fine flavor; 2½ feet.....	.40	.75	5.25

Field Varieties.

Black-Eyed Marrowfat. Extensively grown as a field pea; hardy and productive; 4 feet.....	15 lbs.	60 lbs.
	\$2.40	\$9.00
Royal Dwarf White Marrowfat. Similar in style and growth to the Black-Eyed; white seeded; very productive; 3 feet.....	2.40	9.00
White Canada Field. Valuable for sowing with oats for green fodder; excellent for feeding to pigeons, etc.....	1.25	4.50

Prices subject to change without notice. (See note on page 2.)

PEPPER.

Grown largely for pickles. Sow in hotbeds early in April and transplant to the open ground when the weather is warm and settled. The rows should be two feet apart and the plants fifteen inches apart in the rows. Rich, warm, mellow soil.

One ounce of seeds will produce about 2,000 plants.

	Pkt.	Oz.
Large Bell. Large and mild flavor; ripens bright red. Used for stuffed peppers.....	.10	.50
Large Squash. Productive; much used for pickles .....	.10	.85
Long Red Cayenne. Bright red; very productive; the flesh very pungent .....	.10	.75
Monstrous Sweet Spanish. A very attractive, red, sweet pepper. The plants are about two and one-half feet high, upright, very compact, vigorous and productive. The fruits are very large and long, frequently seven inches in length and about two inches in diameter, with very thick, mild flesh of excellent quality. The color is deep green when fruit is young, rich red when ripe.....	.10	.85
Red Cherry. Small, round, smooth, glossy scarlet fruit. ....	.10	.75
Sweet Mountain or Mammoth. Similar to the Bell, but larger .....	.10	.85

POTATOES (Maine grown, certified stock.)

10 to 12 bushels, or about 4 barrels, sufficient for one acre. One peck will plant 75 hills.

Prices quoted on application.

Early Harvest. Extra early, large yielder; superb quality. The tubers average large size. A desirable early variety.

Early Rose. The pioneer of all the improved varieties, still very popular and highly esteemed.

Extra Early White Rose. As near perfection as any white potato grown, and one of the most reliable for earliness, quality and productiveness. Is uniform in size and shape, being oblong, with roundish seed end, and smooth surface. A grand general crop variety.

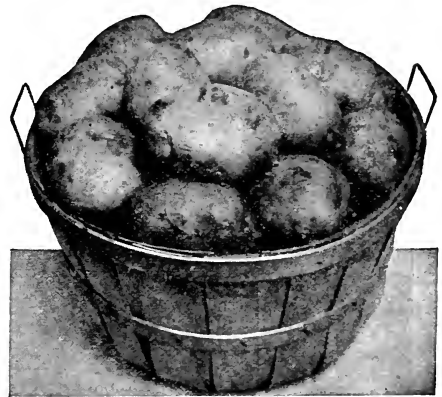
Gold Coin. Tubers are of a desirable size, in form slightly oblong, rather broad and quite thick, skin smooth, and of a light golden tint, sufficient to make them distinct from the white-skinned varieties; flesh pure white.

Improved Green Mountain. Improved by careful selection of seed. In season it is medium; one of the best yielders, and keeps well; color white, form round or oval, smooth skinned and a heavy yielder.

Irish Cobbler. One of the most reliable of the early varieties. Cream-white color, vigorous grower, ripens uniformly, and a good keeper.

Norcross. Large white potato; flat, oval, and perfect in shape; very fine in quality and a large yielder.

Sunlight. An extra early market variety, medium size, oval or oblong in shape, color very white; a handsome potato, of good quality.



PUMPKIN.

Same cultivation as for cucumbers and melons. One ounce for 20 to 25 hills; 3 pounds for an acre.

	Pkt.	Oz.	¼ lb.	Lb.
Connecticut Field. Large; used for stock.....	.05	.10	.35	\$1.00
Large Cheese. A large flat variety; flesh yellow and sweet.....	.05	.15	.50	1.50
Mammoth King. The best large pumpkin in use. Immense, globular shaped, flattened a little at the end. Skin reddish yellow in color, and flesh rich orange. This is unquestionably the best mammoth pumpkin, running very uniform in shape and color.....	.05	.15	.45	1.50
Mammoth Tours. Grows to enormous size, frequently weighing from 100 to 150 pounds. Oblong in shape, and is mainly used for feeding stock .....	.05	.15	.45	1.50
Quaker Pie. A creamy-white, pear-shaped pumpkin of rich flavor and a good keeper. ....	.05	.20	.60	2.00
Sugar or New England Pie. For making pies this variety cannot be excelled. The pumpkins are small, but very sweet, fine-grained and of the best quality.....	.50	.15	.40	1.25
Winter Luxury. Generally regarded as the finest quality pie pumpkin. Besides its high quality it is the best winter keeper of all. In size about nine or ten inches in diameter; skin is a beautiful deep orange yellow .....	.05	.20	.60	2.00

RHUBARB.

Sow in drills eighteen inches apart and one inch deep. Thin out the plants to six inches apart. In the fall prepare the permanent bed by trenching two feet deep, mixing a liberal quantity of manure with the soil. Into this set the plants about five feet apart each way. The stalks should not be cut until the second year. One ounce should give about 500 plants.

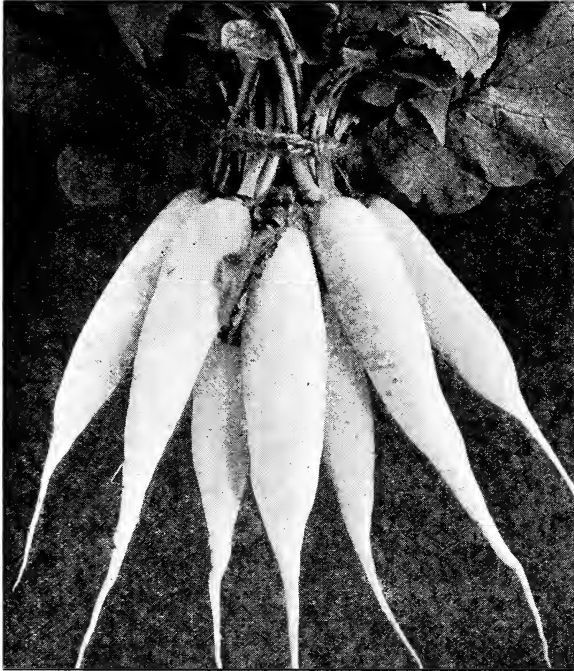
	Pkt.	Oz.
Linnaeus. Early, large, tender and of very fine quality .....	.05	.25

Prices subject to change without notice. (See note on page 2.)

RADISH.

Radishes thrive best in a light, rich, sandy loam; heavy or clayey soils not only delay their maturity, but produce crops much inferior, both in appearance and flavor. For a successive supply, sow from the middle of April until September, at intervals of two or three weeks. For an early supply they may be sown in a hot-bed in February. *One ounce for 100 feet of drill.*

Crimson Giant Forcing. Rich, crimson color, flesh white and solid, and of a mild and delicious flavor. Grows to a large size without becoming pithy. Excellent for forcing



ICICLE RADISH.

maturing in about twenty days; round, bright red, with small tops; very mild

Round Black Spanish. One of the hardiest and best for winter use

SPINACH.

For spring and summer use, sow in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession. For winter and early spring use, sow in September in well manured ground; cover with straw on the approach of severe cold weather. The New Zealand spinach, which requires more room, may be started from seed early in spring to give greens during the heat of summer. *One ounce to 50 feet of drill; 10 to 12 pounds per acre.*

Fall or Winter. One of the hardiest for fall planting.

Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

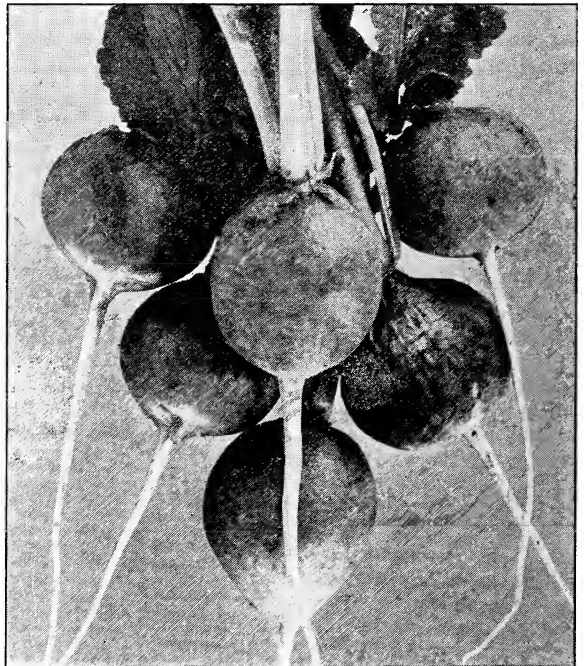
Long Standing. Dark green; the longest standing before going to seed.

Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

New Zealand. Of branching habit; makes a very large plant, which stands drouth well. Leaves thick and fleshy, enduring the entire summer.

Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
Early Scarlet Globe. Fine for forcing. Shape roundish oval; large; brilliant red; flesh white, solid, crisp and mild . . . . .	.05	.15	.45	\$1.50
Early Scarlet Turnip. Round, scarlet, small, short top; mild and crisp . . . . .	.05	.15	.45	1.50
Early Scarlet Turnip (white tip). Handsome bright scarlet color, with white tip . . . . .	.05	.15	.45	1.50
Early White Turnip-Rooted. Round; clear white . . . . .	.05	.15	.45	1.50
French Breakfast. A variety of quick growth; very mild and tender. One of the best for forcing . . . . .	.05	.15	.45	1.50
Icicle. Quick growing; clear white. Fine for forcing . . . . .	.05	.15	.45	1.50
Long Scarlet Short Top. Very long and crisp; for frames or open ground . . . . .	.05	.15	.45	1.50
Non Plus Ultra. The earliest forcing radish; extra early,				



SCARLET TURNIP RADISH (white tip).

Prices subject to change without notice. (See note on page 2.)

SPINACH—Continued.

	Pkt.	Oz.	¼ lb.	Lb.
Round Thick-Leaved. A valuable variety, with thick, dark green leaves; long standing and hardy .....	.05	.10	.25	.75
Savoy Leaved—Bloomsdale. Large, curled and wrinkled leaves; fine market sort. Especially recommended for market gardeners .....	.05	.10	.25	.75
Victoria. A variety producing large, thick leaves of fine color and quality .....	.05	.10	.25	.75

Market gardeners, and others using large quantities, are requested to write for special quotations.

SALSIFY (Oyster Plant).

Commonly called vegetable oyster. Used stewed, boiled or fried. When cooked has an oyster flavor. Sow early in drills fifteen inches apart; cover the seeds with fine soil, an inch and a half deep.

One ounce to 50 feet of drill.

	Pkt.	Oz.	¼ lb.	Lb.
Mammoth Sandwich Island .....	.05	.30	\$1.00	

SQUASH.

Any good, rich soil is adapted to the growth of the squash. They only thrive well in a warm temperature, as all the varieties are tender annuals, and the seed should not be sown in the spring until all danger from frost is past and the ground is warm and thoroughly settled. The hills for bush varieties should be about six feet apart; for running sorts, ten feet. Leave two plants to a hill. *Running varieties, 1 ounce to 20 hills; 4 pounds per acre. Bush varieties, 1 ounce to 50 hills; 2 pounds per acre.*

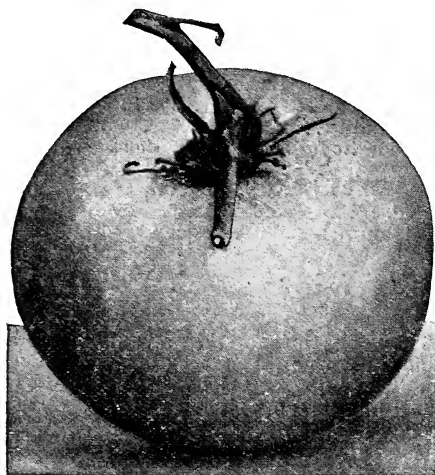
**SQUASH.**

	Pkt.	Oz.	¼ lb.	Lb.
Boston Marrow. A much esteemed variety; a good keeper and of excellent flavor. Delicious. In color it closely follows the Hubbard, and in thickness of flesh it surpasses nearly every variety. No squash compares with it in fineness and compactness of grain, dryness and sweetness and richness of flavor. It is a fall and winter squash, but does not acquire its best qualities until winter. ....	.05	.15	.40	\$1.25
Early Prolific Marrow. For fall and winter use this is a very desirable sort. Is of excellent quality and keeps well. Color, brilliant orange red. ....	.05	.15	.50	1.75
Hubbard. Standard winter squash, a general favorite and grown more extensively than any other late variety; color dark green; shell extremely hard; flesh dry, fine-grained and sweet; excellent keeper. ....	.05	.15	.40	1.25
Hubbard, Blue. Hard shell, light blue in color, thick meat. Dry and fine quality. Favorite winter sort. ....	.05	.15	.50	1.75
Hubbard, Golden. Similar to Green Hubbard, of a rich orange-red color, and of fine flavor. ....	.10	.30	\$1.00	3.50
Hubbard, Warty. Dark green color, shell hard and warted; good keeper. ....	.05	.15	.50	1.75
Mammoth Chili. Grows to a large size, often weighing over two hundred pounds; excellent for stock. ....	.05	.15	.50	1.75
Pike's Peak or Sibley. A vigorous, prolific old standard; oval shape, tapering at blossom end; skin dark green. The flesh, of very superior quality, is light yellow. ....	.05	.15	.50	1.75
Summer Crook-Neck. Early, productive and of good quality; color orange-yellow. ....	.05	.15	.40	1.50
Yellow Bush Scalloped. An early market variety; excellent for shipping ....	.05	.10	.30	1.00

TOMATO.

This vegetable is one of the most important of all garden products. They thrive best in a warm, light, rich soil. For early plants, sow about the first week in March in a hotbed, or in boxes or pots in a warm window. When the plants are about two inches high, set four inches apart in boxes three inches deep, or pot singly. If again transplanted before setting out, the plants will be still more stocky. Set out in the open ground about the first of June, four feet apart each way, using a shovelful of rotted manure in each hill. *One ounce will produce about 2,000 plants.*

Prices subject to change without notice. (See note on page 2.)



EARLIANA TOMATO.

TOMATOES—Continued.

	Pkt.	Oz.	¼ lb.
Bonny Best. Color, an intense scarlet. It is roundish and slightly flattened at stem end. Early, prolific and uniform in shape and size.....	.05	.35	\$1.00
Chalk's Early Jewel. A fine second early tomato, about ten days later than Earliana. Fruit large size and fine flavor. The plants are compact and strong; one of the best for shipping and the home garden.....	.05	.35	1.00
Dwarf Champion. Dwarf variety; fruit medium size, resembling the Acme in color.....	.05	.35	1.00
Dwarf Stone. The largest fruited of the dwarf varieties, the fruit being of a bright scarlet, and growing in clusters; flesh very solid, firm and smooth.....	.05	.30	1.00
EARLIANA. The earliest large tomato. Its large size, handsome shape, beautiful red color, and fine quality are unsurpassed by any of the best early and medium sorts.....	.05	.35	1.00
Fordhook. Extra early; perfectly smooth and solid; medium size.....	.05	.35	1.00
John Baer. An early variety. Smooth, solid fruit, brilliant red in color.....	.10	.50	1.50
Livingston's Beauty. Color very glossy crimson; grows in clusters of four or five; fruit large and solid.....	.05	.30	1.00
Livingston's Favorite. Productive; good flavor; few seeds; flesh solid, smooth and handsome.....	.05	.30	1.00
Livingston's Perfection. Early, large, smooth and solid; blood red color.....	.05	.30	1.00
New Stone. Fruit very large and deep, bright scarlet, smooth, ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed, of the finest quality.....	.05	.30	1.00
Red Cherry. A small, early variety, size and shape of a cherry; for pickling.....	.05	.35	1.00
Red Cross. Early, very smooth and even in size throughout the season.....	.05	.30	1.00
Scarlet Globe. Brilliant scarlet, ripens evenly, is smooth, round, a vigorous grower and a most desirable table and canning variety.....	.05	.35	1.00
Table Queen. Early, smooth, bright red color; flesh very solid; fine table variety....	.05	.30	1.00
Yellow Plum. Similar to Red Cherry, excepting color bright yellow.....	.05	.35	1.00

TOBACCO.

One ounce is sufficient for an acre.

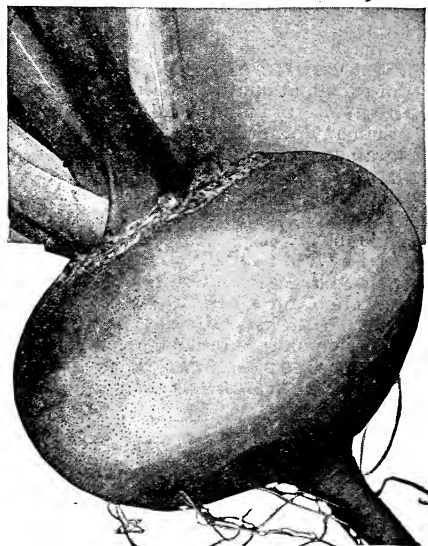
Connecticut Seed Leaf. One of the best varieties. The leaves are of good width and length, and grow closely on the stalk.....	.05	.30	\$1.00
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TURNIP.

Turnips thrive best in rich, sandy, gravelly soil. The earliest varieties can be sown as soon as the ground can be worked, either in drills or broadcast. For a succession sow at intervals of a fortnight until the last week in July for the fall and main crops. To keep the roots fresh during the winter, they may be placed in a cool, dry cellar and buried with dry sand.

One ounce for 150 feet of drill; 1 1-2 to 2 pounds in drill or 2 1-2 to 3 pounds broadcast to the acre.

	Pk.	Oz.	¼ lb.	Lb.
Early White Six Weeks. Pure white; very early.....	.05	.15	.40	\$1.25
Golden Ball. A rapid grower of excellent flavor; bright yellow, good keeper, and a superior table variety.....	.05	.15	.40	1.25
Long White or Cow Horn. Flesh white, fine grained and sweet, and of excellent quality.....	.05	.15	.40	1.25
Purple Top Milan. The earliest variety in cultivation. Flesh white, hard, and of excellent quality.....	.05	.25	.75	2.50
Purple-Top Strap Leaf. Excellent variety for main crop, equally good for spring or fall sowing; white flesh.....	.05	.15	.40	1.25



PURPLE-TOP WHITE GLOBE.

Prices subject to change without notice. (See note on page 2.)

TURNIP—Continued.

	Pkt.	Oz.	¼ lb.	Lb.
Purple-Top White Globe. Globular shape, handsome and of superior quality, either for the table or stock. It is a heavy producer, early and a good keeper. The flesh is white and skin white, with purple at portion which grows above the ground	.05	.15	.40	\$1.25
Sweet German. White, sweet and a good keeper.....	.05	.15	.40	1.25
White Egg. Oval, handsome and sweet.....	.05	.15	.40	1.25
Yellow Aberdeen. An excellent hardy variety, keeping well through the winter..	.05	.15	.40	1.25
Yellow Stone. Fine, hard winter sort. ....	.05	.15	.40	1.25

RUTA BAGA or SWEDE TURNIP.

Carter's Imperial Hardy Swede. An improvement upon the other varieties, being larger, the flesh firmer, and an excellent keeper.....	.05	.15	.40	1.25
Skirving's Purple-Top. A standard variety; hardy and productive.....	.05	.15	.40	1.25

FORAGE SEEDS, GRAINS, ETC.**At the Lowest Market Rates and of the Best Quality.****Barley.**

Chevalier. A two-rowed variety. Head a little longer than the six-rowed varieties and the grain larger, plump, extra heavy and in favorable seasons nearly white. On account of its attractive appearance and fine quality, the grain brings the highest price, and is also extensively grown for green fodder.

Buckwheat.

Japanese. The most desirable variety. If sown at the same time as the Silver Hull it will ripen earlier and yield nearly double the amount. It is of much stronger growth than the common buckwheat and the kernels are fully twice the size.

Millet.

Japanese Barnyard. Succeeds in almost any ordinary soil, and may be sown from the middle of May to the first of July. Is distinct from other varieties. Enormous crop, and is excellent, either green or cured, for hay. Exceedingly popular as a forage plant.

Golden. Medium early forage plant, prolific in stalk and grain.

Hungarian. Probably used more than any other millet for fodder during the summer months. Remains green when almost all other vegetation has dried up. It is one of the very best plants for green fodder or for ensilage; makes hay of good quality.

Soudan Grass.

A new annual forage crop. Soudan grass is a drought-resistant hay crop of great merit. In dry sections it yields more forage than millet, and the hay is relished by stock of all kinds. After the ground has become warm, seed may be sown broadcast at the rate of from 16 to 24 pounds per acre; if planted in drills 18 to 24 inches apart, from 4 to 6 pounds per acre will be sufficient.

Oats.

The "K. & W." Northern White. This variety is free from rust, early and extremely hardy, yielding remarkably heavy crops, the grains being large, white, plump and first-class in every particular. These oats have been carefully selected and thoroughly cleansed.

Swedish Regenerated. One of the most productive varieties of oats ever introduced. The straw is very firm, stiff and elastic and does not readily lodge. Early and ripens uniformly. The kernel is large and plump, with a thin hull, and of fine general appearance.

Rye.

Rosen Rye (Winter). Produces a strong, vigorous straw and stools to a remarkable degree. The grain is large, plump, heavy and of beautiful color, commanding a premium on the market over other grains. Owing to its vigorous stooling property less seed is required, the practice being about one and one-half bushels per acre. At the State Experimental Farm in Michigan, for a number of years, the average yield has been 41.3 bushels per acre, of an exceptionally high quality of grain, and 46 bushels per acre is not an unusual yield.

Winter. This variety is fast gaining in popularity as a cover crop and produces an abundance of early green feed. If allowed to mature will yield a heavy crop of grain and a fine quality of straw if cut about July 1

Spring. For a catch crop this is best for sowing in the spring, as a crop may be obtained by later sowing than any other grain, although it does not yield as heavily as the winter rye.


Prices subject to change without notice. (See note on page 2.)

FORAGE SEEDS, GRAINS, ETC.—Continued.**Wheat.**

Marquis (Spring). A variety produced by scientific cross breeding of the hard Calcutta and the frost-resisting Red Fife variety. First introduced by the Central Experiment Station in Ottawa, Canada, and has since rapidly displaced many other varieties in the Northwest and in Canada. In appearance Marquis wheat is similar to Red Fife, but the heads as a rule are heavier and the stalks shorter, making it less likely to lodge. The kernel is flinty, a little darker red and more plump than Fife. It is beardless, having smooth yellow chaff, but its most valuable feature lies in its earliness, as it matures a week or ten days earlier than Red Fife. Thrashing reports from the Northwest indicate yields of 40 to 50 bushels per acre; weight, 64 to 66 pounds per measured bushel, and they report it to be of the highest milling quality. Not in many years has such a valuable variety been introduced. Our stock is of the highest purity and germination. Farmers who planted Marquis wheat in New England last season had most satisfactory returns.

Write for quotations on all grain and grass seeds.

“New Era” Cow Peas.

The seed resembles a small brown bean in appearance, and is one of the best varieties to sow, as it is extremely early, a good cropper, and produces more seed pods than most other kinds. A very valuable forage plant. Sow at the rate of $1\frac{1}{2}$ bushels per acre. 

Write for price.

Early English Dwarf Essex Rape.

Superior to any other variety offered.

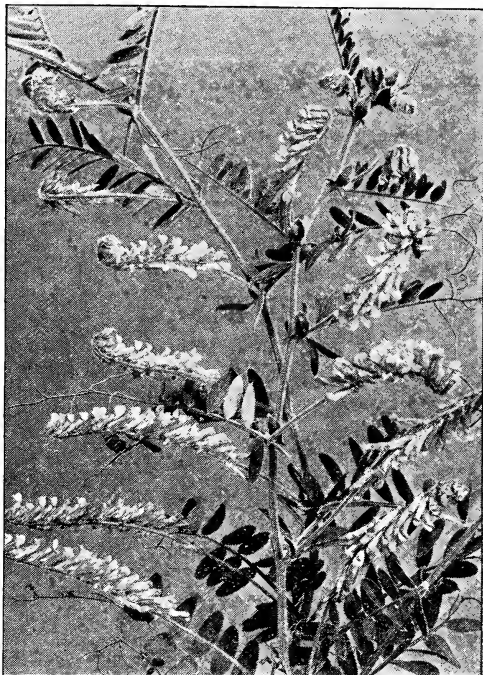
A forage plant of great merit, easily grown in any locality, and one of the most satisfactory quick-growing crops, especially for sheep.

As a fattening food for sheep, cattle, calves or pigs, it is without a rival in point of cheapness, is hardy, withstands drought, and will produce a crop in any soil. The seed may be sown from May to July, 10 to 12 pounds per acre.

Per lb., 20 cts. Per 100 lbs., \$18.00.



SOJA OR SOY BEANS.



VETCHES.

Vetches or Tares.

Spring Vetches. Highly valuable for soiling or for green manuring. Sometimes grown with oats for mowing and feeding to stock. Use 120 to 180 pounds to the acre broadcast, or 60 to 120 pounds in drills.

Per lb., 12 cts. Per 100 lbs., \$10.00.

Winter Vetches. Also called Sand Vetch, or Hairy Vetch. Recommended for fall sowing with rye, which serves as a support. It is perfectly hardy in all parts of the country, can be harvested or plowed under and the ground used for the usual spring crop. Sow 60 pounds of the seed per acre, together with $\frac{1}{2}$ bushel of rye.

Per lb., 22 cts. Per 100 lbs., \$20.00.

Soja Beans.

Produce an enormous crop of both vines and pods. Valuable as a forage crop, and for fertilizing the soil, also for pasturing, feeding as green fodder, and for silo purposes. Sow $\frac{1}{2}$ bushel to the acre.

Write for price.

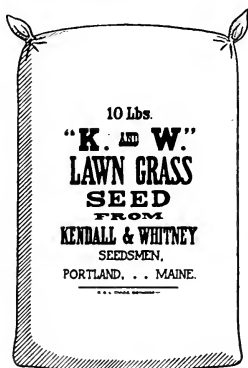
ALL LEGUMES—INOCULATE, FOR BEST RESULTS, WITH NITROGEN FIXING BACTERIA.

Prices subject to change without notice. (See note on page 2.)

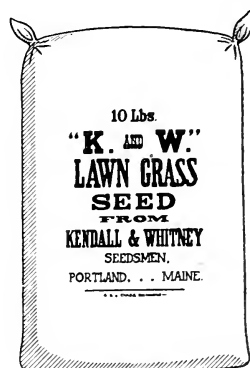
"K. & W." LAWN GRASS SEED.

The essentials for a fine lawn are: First, a rich, well drained soil; second, careful preparation of the ground, making it as fine and smooth and mellow as possible; third, a wise selection of seeds; fourth, sowing at such a time as to give the young plants a chance to become well established before being subjected to very dry or cold weather or to the direct rays of the hot summer sun. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn, and a combination of the proper sorts is required for a perfect, carpet-like lawn. It may be planted early in spring or fall and should be sown at the rate of seventy-five pounds per acre. If sown in the spring, sow as early as possible, making the surface very fine and smooth, then raking it over and sowing the seed just before a rain, which, if the surface has just been raked, will cover the seed sufficiently. For fall seeding, sow before the autumn rains and early enough to enable the young grass to become well established before very cold weather, when a light dressing of manure should be given.

Many low-priced grass seed mixtures weigh only fourteen pounds per bushel. This indicates either a good proportion of chaff or some of the real good varieties in the rough state, not properly cleansed so as to leave only the vital part and less of the chaff or shell—in other words, so many less seeds to the quart or pound that will germinate and grow real grass.



"K. & W." Lawn Seed weighs about twenty-five pounds per bushel, which means that one pound will sow about twice as much as one pound of some of the cheaper mixtures.



1 lb. to 300 square feet.

75 lbs. per acre.

PRICES:

1 lb., 35c.; 5 lbs., \$1.65; 10 lbs., \$3.00; 25 lbs., \$7.00.

FAIR GREEN MIXTURE.

Price—Per lb., 45c.; per 100 lbs., \$35.00.

PUTTING GREEN MIXTURE.

Price—Per lb., 50c.; per 100 lbs., \$45.00.

If sent by mail, add six cents per pound for postage, and for larger shipments by mail, see parcel post rates on page 2 of cover.

Prices subject to change without notice. (See note on page 2.)

BOOKS ON RURAL TOPICS.

All books sent postpaid on receipt of price.

Agriculture.

Farmers' Encyclopedia of Agriculture	\$1.50
The Right Use of Lime in Soil Improvement	1.25
The Young Farmer: Some Things He Should Know	2.00
Study of Corn .....	.90
Farm Grasses of the U. S.	1.75
Soils	1.75
Farm Manures	2.00

Fruit Growing.

Principles and Practice of Pruning	\$2.50
Modern Fruit Marketing	1.75
American Fruit Culturist	3.50
Beginners' Guide to Fruit Growing	1.00
American Apple Orchard	1.75

Dairying and Live Stock.

The Business of Dairying	\$1.75
First Lessons in Dairying .....	.90
Questions and Answers on Butter Making .....	.90
Cheese Making	2.25
Farmers' Encyclopedia of Live Stock	5.50
Farm Dairying	2.00
First Principles of Feeding Farm Animals	2.00

Management and Feeding of Sheep	\$2.50
Swine in America	3.50

Practical Manuals for Vegetable Gardeners.

Home Vegetable Garden	\$1.50
Vegetable Gardening	2.50
Mushroom Growing	2.00
Vegetable Forcing	2.50
Melon Culture .....	.90
Peas and Pea Culture .....	.90
The Potato	1.00
Celery Culture .....	.90
Bean Culture .....	.90
Asparagus .....	.90
New Onion Culture .....	.90
Tomato Culture .....	.90
Cabbage, Cauliflower and Allied Vegetables .....	.90
Sweet Corn	1.00

Poultry Books.

The Mating and Breeding of Poultry	\$2.50
Poultry Breeding and Management	2.00
A Living from Eggs and Poultry	1.40

VALUABLE TABLE SHOWING THE QUANTITY OF SEED USUALLY SOWN UPON AN ACRE.

Lbs. per bush.		Lbs. per bush.	
Alfalfa	20 lbs.	Onion Sets, in drills	32
Barley (broadcast)	48	Orchard Grass	14
Beans, Dwarf, in drills	60	Parsnip, in drills	14
Beans, Pole, in hills	60	Peas, smooth (field varieties), broadcast	60
Beets, Mangel Wurzel	60	Peas, wrinkled, in drills	56
Beets, Table, in drills	5 lbs.	Perennial Rye Grass	24
Buckwheat	1 bu.	Potatoes (cut tubers)	60
Cabbage, in beds to transplant	4 to 5 ozs.	Pumpkin, in hills	10 to 12 bu.
Carrot, in drills	3 to 4 lbs.	Radish, in drills	3 lbs.
Clover, Alsike	10 lbs.	Red Top (re-cleaned)	8 to 10 lbs.
Clover, Crimson	20 lbs.	Rhode Island Bent, chaff seed	6 to 8 lbs.
Clover, Red	15 to 20 lbs.	Rhode Island Bent (fancy re-cleaned)	3 bu.
Clover, White	8 to 10 lbs.	Rough Stalked Meadow	20 lbs.
Corn, for fodder, in drills	70 to 84 lbs.	Rye, broadcast	2½ to 3 bu.
Corn, Sweet, in hills	15 lbs.	Sage, in drills	1½ to 2 bu.
Creeping Bent	3 bu.	Sheep Fescue	8 to 10 lbs.
Crested Dogstail	1½ to 2 bu.	Squash (bush varieties), in hills	2½ to 3 bu.
Cucumber, in hills	2 lbs.	Squash (running varieties), in hills	10 to 12 lbs.
English Rye Grass	3 bu.	Squash Grass (broadcast)	2½ lbs.
Fine-leaved Fescue	35 lbs.	Sweet Vernal (annual)	4 lbs.
Hard Fescue	30 lbs.	Sweet Vernal (perennial)	16 to 24 lbs.
Hungarian	1 bu.	Tall Fescue	2 bu.
Italian Rye Grass	2½ to 3 bu.	Turnip, broadcast	2 bu.
Kentucky Blue Grass	3 bu.	Turnip, in drills	4 to 5 bu.
Lawn Grass	3 bu.	Timothy	½ bu.
Meadow Fescue	2 bu.	Tobacco	1 oz.
Meadow Foxtail	3 bu.	Tomato, to transplant	4 ozs.
Melon, Musk, in hills	2 to 3 lbs.	Turnip, broadcast	2½ to 3 lbs.
Melon, Water, in hills	4 to 5 lbs.	Turnip, in drills	1½ to 2 bu.
Millet, German	1 bu.	Various Leaved Fescue	30 lbs.
Millet, Japanese	25 lbs.	Vetches	(See page 38.)
Oats, broadcast	2 to 3 bu.	Wheat, broadcast	1½ to 2 bu.
Onion, in drills	5 lbs.	Wood Meadow	2 to 2½ bu.

QUANTITY OF SEEDS REQUIRED FOR A GIVEN NUMBER OF HILLS OR LENGTH OF DRILLS.

Asparagus	1 ounce....	50 feet of drill	Melon, Musk	1 ounce....	60 hills
Beet	1 ounce....	50 feet of drill	Mustard	1 ounce....	40 feet of drill
Beans, Dwarf	2 pounds..	100 feet of drill	Okra	1 ounce....	40 feet of drill
Beans, Pole	2 pounds..	150 hills	Onion	1 ounce....	100 feet of drill
Carrot	1 ounce....	100 feet of drill	Onion sets	1 pound...	50 feet of drill
Celery	1 ounce....	100 feet of drill	Parsley	1 ounce....	150 feet of drill
Corn, Sweet	1 pound...	125 hills	Parsnip	1 ounce....	150 feet of drill
Cress	1 ounce....	100 feet of drill	Peas	2 pounds..	75 to 100 feet of drill
Cucumber	1 ounce....	50 hills	Pumpkin	1 ounce....	20 to 25 hills
Dandelion	1 ounce....	150 feet of drill	Radish	1 ounce....	100 feet of drill
Kale	1 ounce....	150 feet of drill	Salsify	1 ounce....	50 feet of drill
Kohlrabi	1 ounce....	200 feet of drill	Spinach	1 ounce....	50 feet of drill
Leek	1 ounce....	150 feet of drill	Squash, bush variety	1 ounce....	50 hills
Lettuce	1 ounce....	125 feet of drill	Squash, running variety	1 ounce....	15 hills
Martynia	1 ounce....	50 hills	Turnip	1 ounce....	150 feet of drill
Melon, Water	1 ounce....	30 hills			

Prices subject to change without notice. (See note on page 2.)

BOWKER'S FERTILIZERS AND STOCKBRIDGE MANURES.



7 1-4 TONS GOOD HAY PER ACRE WITH BOWKER'S.

This picture shows the first crop. The second looked just as big.

"FOR THE LAND'S SAKE" use Bowker's Fertilizers and Stockbridge Special Manures. These celebrated fertilizers need no introduction to our farmer friends. They have been producing big crops in Maine and elsewhere for years. They are very popular with our customers. Get our prices and order early.

KENDALL & WHITNEY, Agents, - - - Portland

Prices subject to change without notice. (See note on page 2.)



479 1-4 Bushels Per Acre on Bradley's Fertilizer.
First Prize—Boys' Potato Club of Maine.

FEED YOUR CROPS AS YOU FEED YOUR STOCK

Modern stock rations which rightly balance the digestible proteins, carbohydrates and fats have revolutionized profits in live stock. They have produced more milk, more beef, more pork, more fat, more eggs.

You know it—every farmer does.

BRADLEY'S FERTILIZERS

Supply plant food rations rightly balanced for your crops. They produce more corn, more potatoes, more truck, more money. They save labor and enable you to keep more stock.

A full stock of these standard fertilizers constantly on hand

————including————

XL Superphosphate of Lime

Northland Potato Grower

Grass Top Dressing

Corn Phosphate

Also Agricultural Chemicals and Agricultural Limestone

Potato Manure

Reliable 6% Potash Fertilizer

Acid Phosphate

Bone-Phosphate and Potash

KENDALL & WHITNEY, Agents,

- - - -

Portland

Prices subject to change without notice. (See note on page 2.)

Chemicals and Fertilizers.

Plain Superphosphate or Acid Phosphate. 14 to 16 per cent. available phosphoric acid. In 200 pound bags.

Nitrate of Soda. 15 per cent. nitrogen; 18.23 per cent. ammonia. In 200 pound bags.

PURE GROUND BONE.

4 to 5 per cent. ammonia, 21 to 23 per cent. phosphoric acid.

A valuable fertilizer, especially for lawns, vines and fruit trees.

ASHES.

Unleached, hard wood ashes, put up in 100 lb. bags. Especially valuable for lawns.

SHEEP MANURE.

A pure, natural manure, and the most nutritious food for plants. Its effect is immediate and lasting; it is clean to handle, and is the best of all manures for mixing with the soil for greenhouse plants. As a lawn top-dressing it is unequalled. For mixing with soil, take one part of manure to six parts soil. For making a liquid, take one pound manure to five gallons of water, which can be used with safety daily if necessary.

PRICES. QUOTED ON APPLICATION, ON ALL FERTILIZERS.

AGRICULTURAL LIME.

Especially prepared for agricultural purposes, and, being finely ground, it can be used in any broadcaster. Many plants and all grains show a decided increase and are greatly benefited by the use of lime, as it corrects all acidity of the soil, sweetening it and freeing it from impurities.

HOW TO TEST THE SOIL FOR ACIDITY.—Take a little soil from the field and place it in a saucer, moisten it well with water and place in it a little piece of blue litmus paper. If within twenty-four hours the litmus paper changes to a red color, the soil is acid and an application of lime should be added at the rate of from 1,000 to 2,000 pounds per acre.

For the ordinary piece of land that requires lime it will be found that once in the rotation of crops, or say once in four years, is as often as lime should be applied, as it will hold the land in its proper condition for that length of time. Price, 100 lb. bags, \$1.00; ton, \$15.00.

BORDEAUX LIME.

Prepared expressly for use in making Bordeaux Mixture; is finely powdered and ready for immediate use. Price, 100 lb. bags, \$1.25.

LAND PLASTER.

Price—Bag of 100 lbs., \$1.25; ton, \$20.00.

Prices subject to change without notice. (See note on page 2.)

Inoculate Your Alfalfa, Clovers, Cow Peas, Soy Beans, Vetches and all other legume crops with

MULFORD CULTURES FOR LEGUMES.

Small Cost

Large Returns

Easy to Use

No Labor Expense

Mulford Cultures contain pure, tested strains of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil.

Mulford Cultures are scientifically prepared and tested with the utmost care and skill. Enormous numbers of these very valuable and desirable bacteria are thus available to you in every package of Mulford Culture and may readily be applied to your seed. The sealed bottle insures purity.

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of wheat, cotton, corn and other non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

Mulford Cultures are prepared for:

ALFALFA	ALSIKE CLOVER	VETCH	LIMA BEANS
CRIMSON CLOVER	BURR CLOVER	VELVET BEANS	LESPEDEZA
SWEET CLOVER	COW PEAS	SWEET PEAS	BEGGAR WEED
RED CLOVER	SOY BEANS	GARDEN PEAS	and others
	PEANUTS	GARDEN BEANS	

Always specify on your order what crop you want to inoculate, as there is a different strain of bacteria for each legume.

PRICES: 5-Acre Size, \$5.00, (Dollar Per Acre)

1-Acre Size, \$1.50

1-4 Acre Size, .75

Small Size (Supplied only in four

varieties, for Garden Peas,

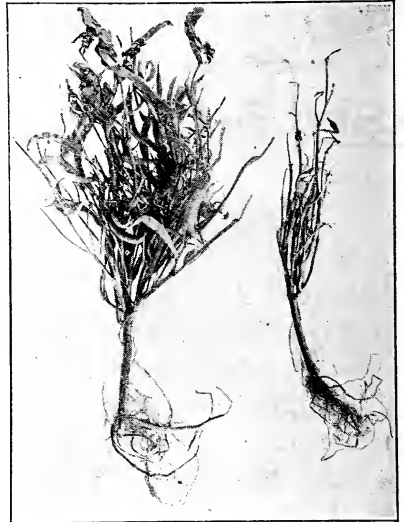
Garden Beans, Lima Beans,

and Sweet Peas) .35

These Prices include delivery on freight shipments.

FREE DESCRIPTIVE FOLDER SENT UPON REQUEST.

Alfalfa plant on right not inoculated. Plant on left inoculated with Mulford Culture for Alfalfa. All other conditions identical. This contrast speaks for itself.



FARMOGERM



HIGH BRED NITROGEN GATHERING BACTERIA.

ALWAYS INOCULATE ALL YOUR LEGUME SEEDS IF YOU WANT THE BIGGEST YIELD AND THE MAXIMUM FERTILIZING VALUE. NO MATTER HOW BIG A CROP YOU ARE GETTING, FARMOGERM WILL IMPROVE IT AND INCREASE THE AMOUNT OF NITROGEN STORED UP FOR FUTURE USE IN THE FORM OF NODULES ON THE ROOTS.

Note the bottle with the Patented Ventilating Stopper. This insures the bacteria being alive and active for at least five years. There is only one FARMOGERM; accept no substitutes.

PRICES.

5-Acre Size, \$8.00.

1-Acre Size, \$2.00.

1-4 Acre Size, 50 cts.

SEED INOCULATION

Prices subject to change without notice. (See note on page 2.)

STERLINGWORTH PLANT TABLETS

A NEW INVIGORATOR FOR HOUSE PLANTS AND VEGETABLES

STERLINGWORTH PLANT TABLETS are a clean, odorless, concentrated, plant stimulant and invigorator. Their use promotes healthy, vigorous leaves and branches, and insures beautiful, luxuriant flowers. They build up the soil scientifically, and make frequent renewal of soil less important. The large amounts of waste matter in what is commonly known as "liquid manure," and "bone plant foods," which pollute the soil, and are many times accompanied by disagreeable odors, are absent in these excellent stimulating tablets. If you want luxuriant, healthy plants, ferns and beautiful flowers, these tablets are just what you are looking for.

PRICES: Large box (250 tablets) sufficient 35 plants 8 months, 50c postpaid medium, (100 tablets) sufficient for 35 plants 3 months, 25c postpaid; trial size, 10c.

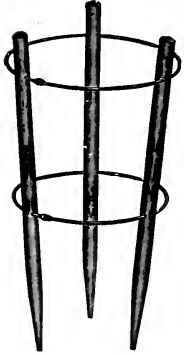


VICTORY PLANT FOOD.

This is an odorless plant food prepared especially for house plants.

6 oz. package, 12 cents; 1 lb. package, 25 cents.

TOMATO AND PLANT SUPPORT.



BARTLETT.

Designed especially to protect tomatoes, peonies, small shrubs and tall growing plants.

THE BARTLETT.

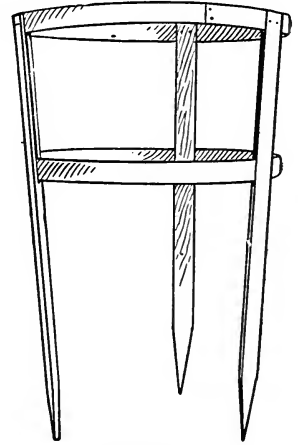
MADE FROM HARD WOOD, WITH WIRE HOOPS.

Price, 35 cents each; \$3.50 per dozen.

THE BRYANT.

MADE OF HARD WOOD STANDARDS AND WOOD HOOPS.

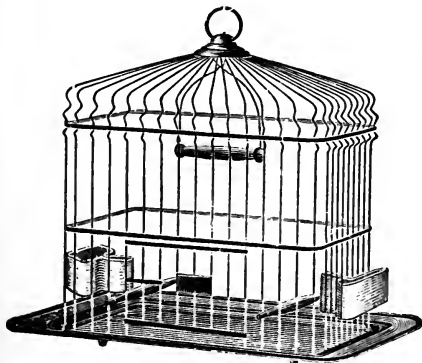
Price, 20 cents each; \$1.75 per dozen.



BRYANT.

ARLINGTON PLANT PROTECTOR.

Price, 15 cents each; \$1.50 per dozen.



BIRD CAGES, SEEDS AND SUPPLIES.

Brass and Japan Bird Cages,

—ALSO—

Parrot and Squirrel Cages.

CANARY SEED, RAPE, MILLET, HEMP, RICE, SUNFLOWER AND CUTTLE FISH.

Prepared Mixed Canary Seed.

GRAVEL, SONG RESTORER, PARROT FOOD AND MOCKINGBIRD FOOD.

Cage Springs, Cups, Hooks, Ladder Chains and Wire Guard Cloth.

Prices subject to change without notice. (See note on page 2.)

STANDARD FLOWER POTS.

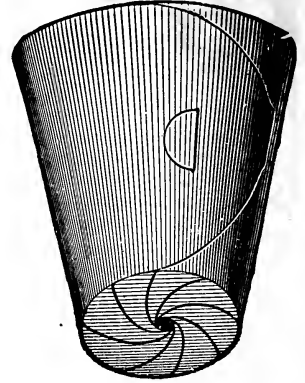


Inches.	Pots. Per dozen.	Saucers. Per dozen.
2	\$.18	
2½	.25	
3	.35	
3½	.40	\$.28
4	.50	.35
5	.85	.50
6	1.25	.60
7	2.10	.95
8	3.00	1.25
9	4.75	1.80
10	5.85	2.10
11	9.25	2.50
12	12.50	3.10
14	21.00	5.40

Measurement from inside to inside. Width and depth equal.

NEPONSET PAPER FLOWER POTS.

Manufactured from fabric which gives them all the necessary rigidity. They are unbreakable and give ample drainage.



Size.	Per doz.	Per 100.	Per 1,000.
2½	.10	\$.50	\$ 4.65
2½	.12	.55	5.30
3	.15	.80	7.00
3½	.18	1.00	9.50
4	.20	1.20	11.55
5	.25	1.90	18.20
6	.35	3.00	24.50

ROUND SEED AND BULB PANS.

Inches.	Each.	Per doz.
6	\$.11	\$1.25
7	.20	2.10
8	.28	3.00

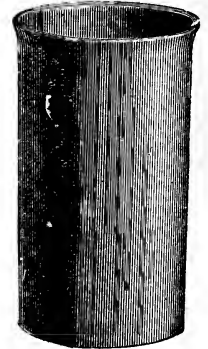
Inches.	Each.	Per doz.
9	\$.45	\$ 4.75
10	.55	5.85
12	1.20	12.50

Special quotations to florists.

FLORISTS' VASES.

FOR DISPLAYING CUT FLOWERS.

No.	8 inches in diameter, 13 inches deep	\$2.00 each.
1	5½	1.65
2	4½	1.50
3	4	1.25
4	3	1.10
00	9	6.00
01	7	3.50
11	5½	2.25
22	4½	2.00
33	4	1.85
44	3	1.45



FIBRE FLOWER POT SAUCERS.

No moisture passes through to injure table, floor or carpet.

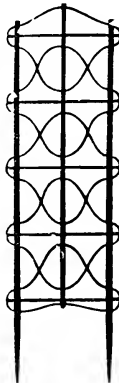
TRELLISES.

BOW TRELLIS.

No.	Each.	Per doz.
0½, 24x 7½ in.	\$.70	\$ 8.00
1, 30x10 in.	1.00	11.00
2, 30x14 in.	1.40	15.00
3, 36x12 in.	1.60	17.00
3½, 42x14 in.	1.75	19.00
4, 48x15 in.	2.00	21.00
5, 60x18 in.	2.25	24.00
6, 72x20 in.	2.50	28.00

FAN TRELLIS.

1½ feet, width at top	6 inches	\$.50	\$ 5.00
2	10	.55	6.00
2½	13	.95	10.00
3	16	1.50	16.00
3½	21	1.65	18.00
4	27	2.25	24.00
5	32	2.80	30.00
6	38	3.25	35.00
7	42	3.70	40.00
8	46	4.15	45.00



VERANDA
TRELLIS.

No.	Each.	Per doz.
00, 18-in. stick, 3½ in. wide	\$.28	\$3.00
00, wide, 20-in stick, 8 in. wide	.35	4.00
0, 24-in. stick, 5 in. wide	.35	4.00
0, wide, 24-in. stick, 8 in. wide	.60	7.00

VERANDA TRELLIS.

5x1½ ft.	\$2.50	\$28.00
6x1½ ft.	3.00	33.00
7x1½ ft.	3.50	39.00
8x1½ ft.	4.00	44.00
9x1½ ft.	4.50	49.00
10x1½ ft.	5.00	55.00
11x2 ft.	5.50	60.00
12x2 ft.	6.00	66.00

Prices subject to change without notice. (See note on page 2.)

PLANT STICKS.

From one and one-half to six feet in length, used for supporting single stalks of roses, dahlias, etc.

	Per doz.	Per 100.
1½ feet, painted green.....	\$.30	\$2.10
2 " " ".....	.50	3.75
2½ " " ".....	.75	5.50
3 " " ".....	1.00	7.50
4 " " ".....	1.60	12.00
5 " " ".....	2.25	18.00
6 " " ".....	2.75	20.00

WOOD POT LABELS.

	PLAIN. Per 1,000.	PAINTED Per 1,000.
4 inch.....	\$1.10	\$1.55
4½ inch.....	1.35	1.85
5 inch.....	1.60	2.05
6 inch.....	2.00	2.50

WOOD TREE LABELS.

3½ inch (copper wire), painted....	\$2.45
------------------------------------	--------

BOUQUET HOLDERS.

No. 1. Small, iron.	Each, 45 cents
No. 2. Medium, iron.	Each, 55 cents
No. 3. Large, iron.....	Each, 70 cents
Glass.....	Each, 50 cents

FOLDING LAWN SETTEE.

Made from hard wood and finished in varnish and vermilion, or green.

Price, \$2.50.

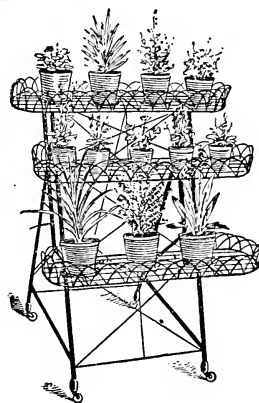
CROQUET.

We carry a complete assortment, manufactured from selected hard wood, handsomely painted and varnished.

\$2.50 to \$6.00 per set.

WIRE PLANT STANDS.

1 shelf, folding,	\$2.75
2 " "	4.00
3 " "	5.50
4 " "	7.25

**TROWBRIDGE'S GRAFTING WAX.**

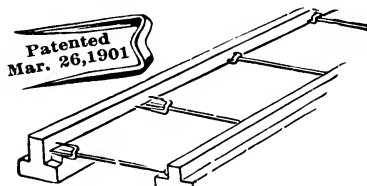
The finest quality made, put up in neat packages with directions for use.

45c. per lb.; ½ lb. packages, 25c.; ¼ lb. packages, 15c. By mail, 6c. per lb. extra.

BLAKE'S GRAFTING WAX.

In 1 lb. packages only. 55c. per lb. By mail, 6c. per lb. extra.

BEESWAX, 55c. per lb. By mail, 6c. per lb. extra.

"PEERLESS" GLAZING POINTS.

Made from galvanized steel wire; are cheap and indestructible. Easy to apply and perfectly satisfactory to use. Per 1,000, 75 cents; by mail, 80 cents.

Hotbed Thermometer. Highest grade, and very accurate. Made with wooden frame, and equipped with brass point to thrust into the soil. \$2.00 each.

Self-Registering Thermometer. Registers accurately the coldest, also the warmest point of temperature. \$3.25 each.

Hotbed Mats. Best rye straw, 6 x 6 feet.

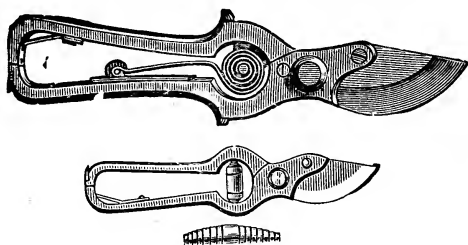
Raffia. The best material for tying plants. Soft, strong and pliable. Lb., 20 cents.

Tinfoil. For bouquets.

Twine, Soft. For tying vines, etc. Large balls, 25 cents.

Tarred Yarn. Low priced material for raspberries, shrubs, etc. Lb., 35 cents.

Prices subject to change without notice. (See note on page 2.)

PRUNING SHEARS.

American.....	65c. to \$1.00
French wheel spring, 8 in.	2.00
French wheel spring, 9 in.	2.25
French wheel spring, 10 in.	2.65

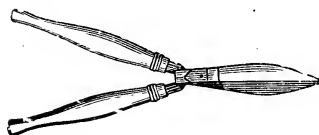
SHEEP SHEARS.

True Vermont, 5½ inch, \$1.15

True Vermont, 6 inch, 1.25

GRASS SHEARS.

Sheep shears style, for trimming grass, 25 cents to \$1.00.

**HEDGE SHEARS.**

8 inch	\$3.00
9 inch.....	3.25
10 inch.....	3.75

BORDER SHEARS (Long Handle).

9 inch	\$5.00
9 inch, with wheel	5.50

LAWN SHEARS (Long Handle).

9 inch	\$5.00
--------------	--------

“JIMMY” WEEDER.

Roots out Dandelions, Plantains, Russian Thistle, and other weeds.

Pulls tap root and all without disturbing the sod.



Price, 25 cents.

Lang Weeder.

Equipped with strap, which allows free use of the hand without dropping the weeder.



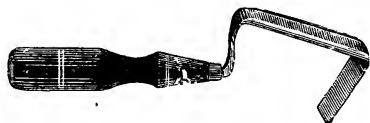
Price, 25 cents.

“Midget” Weeder.

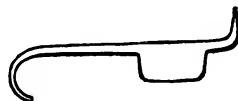
9-inch handle, weight 12 ounces, price, 50 cents.

The “Norcross” Midget is unequalled for close cultivation in flowers, low shrubbery and garden. Unlike cheaply made one-piece malleable weeder, it is made and finished the same as our cultivator-hoes.

Illustrated on page 59.

HAZELTINE WEEDER.

Price, 30 cents.

GRAFTING CHISEL.

Price, 85 cents.

EXCELSIOR WEEDER.

This instrument will work well among rows of seedlings and ornamental plants, or in any place where freedom from weeds is desired.

Price, 15 cents.



Prices subject to change without notice. (See note on page 2.)

STANDARD TREE PRUNER.

Is the lightest device made for the purpose.

Will cut as large wood as any other device that is practical to handle.

Will clip the slightest twig on the extreme end of the limb.

Price.

8 feet	\$1.75	14 feet	2.50
10 feet	2.00	16 feet	2.75
12 feet	2.25	Extra blades.....	.20

CLYDE IMPROVED DRAW CUT PRUNER.

Solid steel blade and hook. Positive draw cut. Hand forged, with four-inch pressed steel ferrules and caps.

Price.

No. 5402. 24-inch handles	\$3.50
No. 5401. 22-inch handles	4.00

ROCKDALE PRUNER.**Price.**

No. 35, 26 in. long,	\$1.50
No. 38, 41 in. long,	2.00

KING PRUNER.**WITH ROPE PULL.**

No danger of receiving shock by crossing electric wires, as they are operated by a cord running the entire length of pole. These pruners are made from a fine quality of steel and carefully tested, the cutters are concaved, making the easiest cut possible, and can readily be taken apart for grinding, etc.

Price.

12-foot pole	\$1.35
14-foot pole	1.50
16-foot pole	1.60
18-foot pole	1.85
20-foot pole	2.00

PRUNING SAWS.

MADE FROM BEST QUALITY STEEL, WITH HARD WOOD HANDLES.



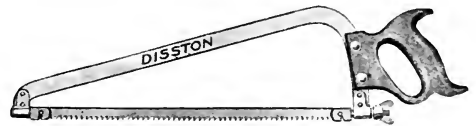
No. 40.

No. 40. 18-inch polished steel blade, with double sawing edge, **\$1.10.**

No. 40. 20-inch polished steel blade, with double sawing edge, **\$1.20.**

No. 16. Steel frame, with adjustable steel blade, **\$1.85.**

This style saw is especially desirable for use in narrow spaces.



No. 16.

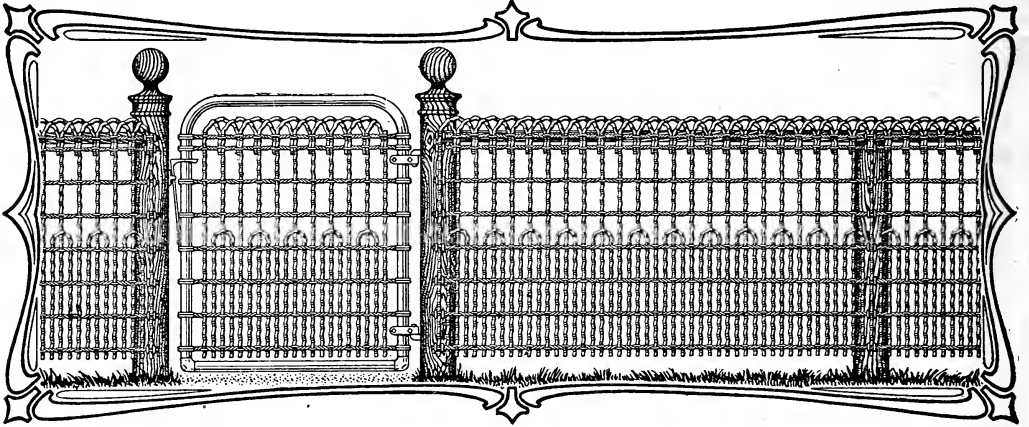
ASPARAGUS KNIFE.

Valuable, not only for cutting asparagus, but for cutting out all deep-rooted weeds from the lawn, such as plantain, thistles, dandelion, etc.

Price, 50 cents.

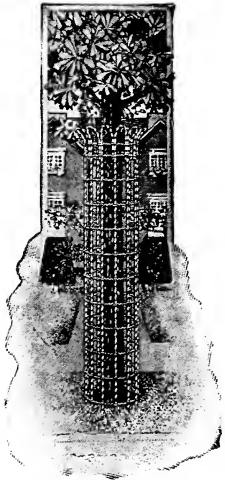
Prices subject to change without notice. (See note on page 2.)

WAUKEGAN-CYCLONE SANITARY WIRE FENCING.



Style "F" fabric shown above on ordinary wood posts opens up the yard to fresh air and sunlight, creates healthy playgrounds out of unsanitary back yards and makes gardens, flower beds, lawns, etc., possible. Pickets are all No. 9 heavily galvanized wire, spaced $2\frac{1}{2}$ inches apart at top, $1\frac{3}{8}$ at bottom, making fence absolutely chicken-proof.

STYLE "F" FABRIC, Three Sizes, 36, 42 and 48 inches high.



CYCLONE TREE GUARD.

Furnished with spiral spring, ready for setting up by clasp hooked ends.

Protects the tree without shading, rubbing or bruising the bark.

Made 6 feet high, of heavily galvanized wire.

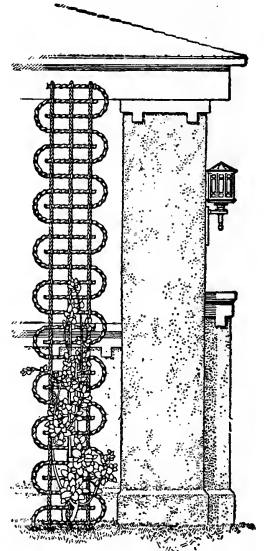
9 inches in diameter.

CYCLONE SINGLE TRELLIS.

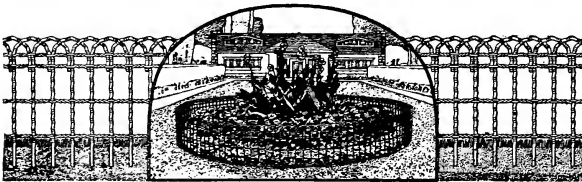
The most practical trellis made for climbing vines and flowers.

Easily placed in position. Cut to any length. Can be used for years, making an extra, low priced trellis that adds to the beauty of porch and home.

18 inches in width.



PERFECTION FLOWER GUARD.



Affords ample protection against dogs, cats, chickens, etc., besides keeping children from running over flower beds. Fits any shape or size of flower bed. No posts necessary. Picket ends are left straight for inserting in the ground. Pickets No. 9, cables No. 13 heavily galvanized wire.

Two sizes, 16 and 22 inches high.

Price on application.

Prices subject to change without notice. (See note on page 2.)

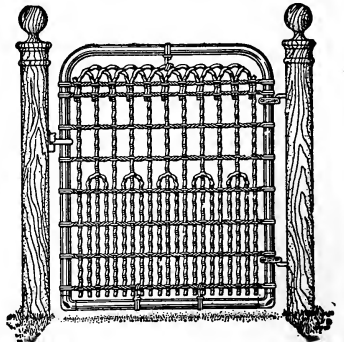
UNIVERSAL GARDEN GATES.

These are low-priced, strong, practical, and durable.

Choice of 36, 42 or 48 inch heights.

3 foot opening.

Write for prices on Garden Gates.



Also on 8, 10, 12, 14 and 16 foot Farm Gates.

Pennsylvania

Quality

LAWN MOWERS.

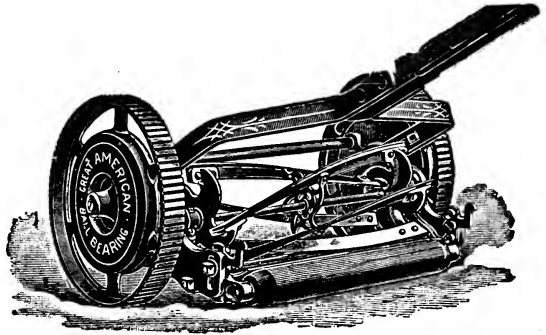
By "Pennsylvania Quality" is meant absolutely the best that can be put into lawn mower construction. All blades are crucible tool steel, oil tempered and hardened, and all castings are reamed and machined to fit perfectly, insuring easy cutting and long life.

Great American Ball Bearing.

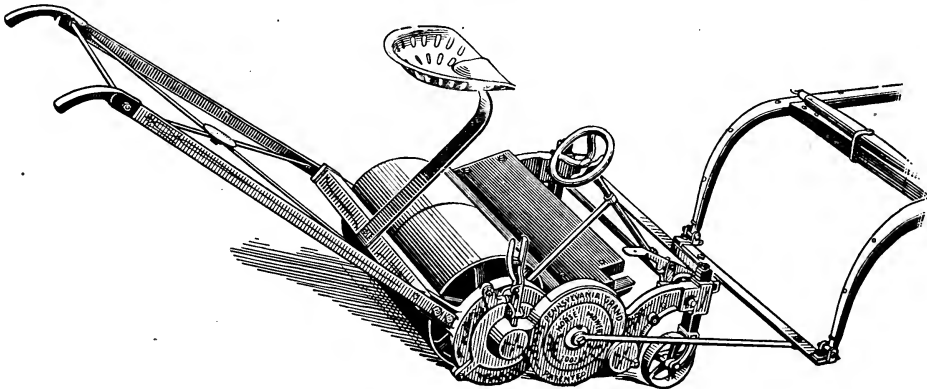
This machine is one of the most popular of the line and consequently is more imitated than any other lawn mower manufactured. **Raised edge, self-sharpening** lower knife, highest grade ball bearings, smooth running, are special features.

10-inch driving wheels. 5 blades.

Sizes.	Prices.
15-inch	\$20.00
17-inch	22.25
19-inch	26.00
21-inch	27.35



PENNSYLVANIA GRAND HORSE MOWER.



Any product of the Pennsylvania factory insures it being of the highest quality, both in material and workmanship. Until a few seasons ago the factory made only one style of horse mower, that with the lower knife adjustable to the revolving cylinder, similar to the majority of other horse and hand mowers, but recently they perfected and patented a new design, radically different from all others. The lower knife is rigidly bolted to the frame, and set to cut $\frac{3}{8}$ inches from the ground, while the cylinder is adjustable for taking up the wear. The height of the cut can be regulated from $\frac{3}{8}$ to $2\frac{1}{4}$ inches, by the wheel at the right of the machine. This new mower is called the Pennsylvania Grand.

Complete with seat, shafts, etc., as illustrated.

Write for Price List.

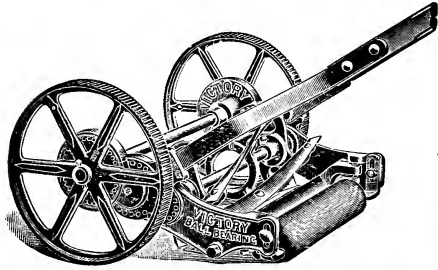
Pennsylvania B. B. Under Cut Trimmer.

This machine is the only one to successfully replace the use of hand shears. The slanting side plate and conical cylinder make it possible to cut all the grass left by the regular style of lawn mower. The unique construction of the **Under Cut Trimmer** permits cutting, not only close up to a wall, fence, trees, etc., but it will get the grass **under** a fence or rock-cut base of tombstones, house foundations, and other places hitherto out of reach of anything but hand shears. For cemeteries it has the special advantages of not **marking** or **smudging** the stones, as the side plate does not come in contact with the stone above the grass line.

Price, \$14.00.

Prices subject to change without notice. (See note on page 2.)





TOWNSEND'S "VICTORY" LAWN MOWER.

Constructed with ball bearings, of the very highest grade. Triple gear, entirely closed, and a removable cutter bar, which, by loosening four small screws, may be rolled out of the machine for sharpening without disturbing the frame.

Width of cut.	14-in.	16-in.	18-in.	20-in.	22-in.	24-in.
Net price:	\$22.75	\$24.00	\$27.00	\$28.00	\$30.00	\$32.00

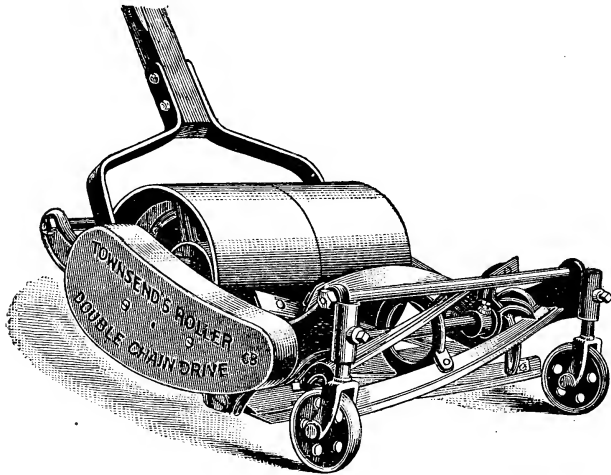
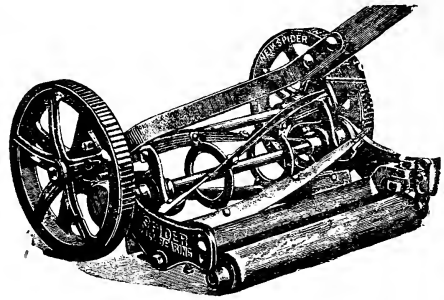
TOWNSEND'S "SPIDER" LAWN MOWER.

Like the "Victory," the "Spider" runs and cuts with ease and rapidity.

It is light, strong, and finely made and adjusted, and is one of the best *medium priced* lawn mowers ever offered.

Is ball bearing, has nine-inch wheels, four-bladed, open wiper, and a simple and easy adjustment.

Width of cut.	14-in.	16-in.	18-in.	20-in.
Net price:	\$19.00	\$21.50	\$23.50	\$25.50



Townsend's Chain Roller Mower.

Designed for Borders and Golf Greens.

Ball bearings of the very highest grade, double driving rolls, eight inches in diameter, sextuple ratchet, almost silent and indestructible, chain drive, light, strong, quiet and easy, and *completely shielded*.

This mower will cut close enough and clean enough to satisfy the most fastidious golfer, and it will run easier and will stay in perfect order longer than any other golf mower.

Sizes, 12-inch, 14-inch, 16-inch, 18-inch.

Price on application.

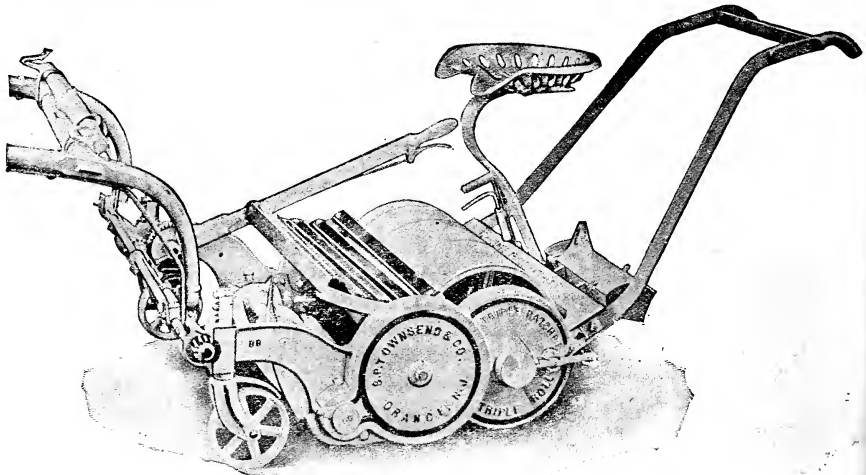
THE TOWNSEND HORSE LAWN MOWER.

The Townsend Mower has triple rolls, with triple pawls in each roll, making a most powerful and instantaneous driving mechanism. Unlike other mowers, the motion of the blades is maintained even when turning sharp corners. The self-aligning journal boxes will be found in this mower only, and prevent cramping, a very common fault in horse lawn mowers.

All machines are fitted complete with tool-box, seat, handles, shafts, and slide-bar attachment, which keeps the horse on the cut grass.

Width of cut, 30 in., 35 in., 38 in.

Write for Price List.



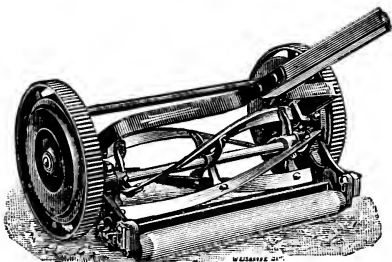
Prices subject to change without notice. (See note on page 2.)

FEDERAL LAWN MOWER.

8-INCH WHEELS.

THE COMBINED POINTS ARE PRICE, SIMPLICITY, DURABILITY, UTILITY.

Width of Cut.	Net Price.
14-inch	\$ 8.50
16-inch	9.00
18-inch	10.25



SPEEDY LAWN MOWER.

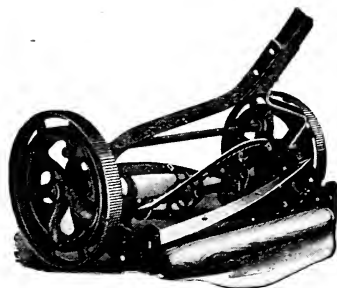
9-inch wheels, with raised rim.

Four-blade cutting reel.

Dust-proof ball bearings.

Durable and easy running.

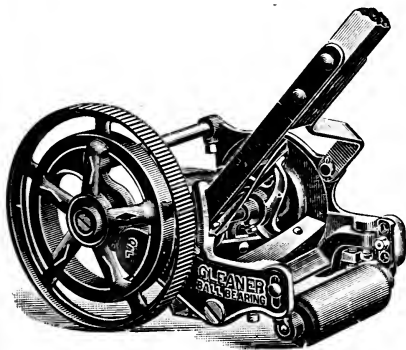
Width of Cut.	Net Price.
16-inch	\$12.00
18-inch	12.25



TOWNSEND'S "GLENER" LAWN TRIMMER.

Does what lawn mowers leave undone. Trims and edges the lawn with remarkable speed and perfection. 9-inch wheel, ball bearing; 4 steel blades, 8-inch cut. Strictly high grade in every particular.

Price, \$12.00.

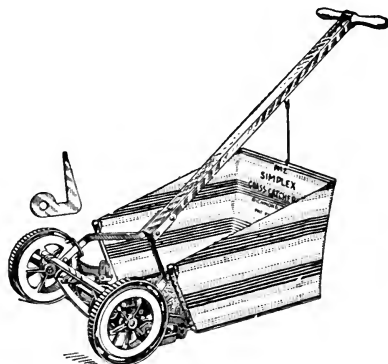


"Nox All" Grass Catchers.

Will fit any mower made. Instantly attached and detached. Canvas body, galvanized iron bottom, combining strength with lightness.

Price.

No. 1, for 12, 14 and 16-inch mowers.....	\$1.60
No. 2, for 16, 18 and 20-inch mowers.....	1.85



Prices subject to change without notice. (See note on page 2.)

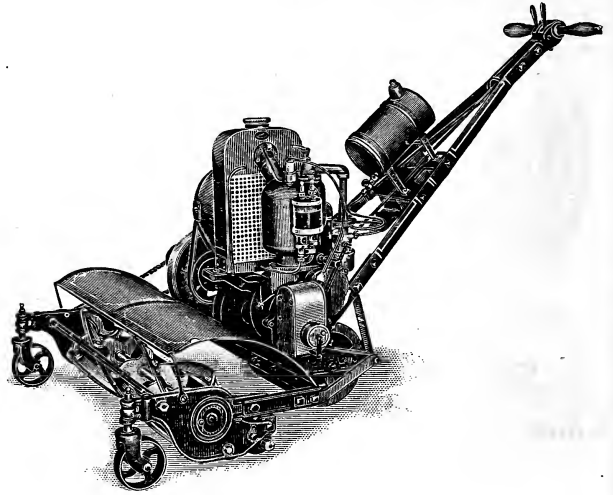
Fuller & Johnson Motor Lawn Mower.

The Motor Lawn Mower represents the highest development in lawn mowing equipment, both from the standpoint of its practicality for every-day use and of combining, as it does, large cutting capacity with great flexibility, enabling the operator to do a beautifully finished job at each cutting without the necessity for any clean-up work afterwards with a hand lawn mower—all with the greatest possible ease. It is at once a labor-saving device and a lawn beautifier. It simplifies, economizes and makes possible far better results than have ever before been possible.

There are various types of horse mowers and automobile mowers with large cutting capacity, but such mowers are useful only for cutting large open areas, without obstacles of any kind, where straight-away cutting is all that is required, but such cases are comparatively rare.

What has been needed for a long time is a practical motor-driven, hand-controlled lawn mower with great flexibility, making it possible to cut close up to and around trees, under shrubbery and along walks and driveways, while at the same time having a mowing capacity of four or five acres per day. The Fuller & Johnson Motor Lawn Mower fulfills these requirements.

The Motor Lawn Mower will enable you to have a better and more perfect lawn at less expense of upkeep. It will give you a better job at each cutting and will enable you to have your lawn mowed more often, for it is not only a time saver but a labor saver as well, requiring, as it does, no propelling effort on the part of the operator except in guiding and directing the machine. A rolling or hilly lawn dotted with trees and shrubbery and traversed with walks and driveways holds no terrors for this machine. In fact, there is no mowing equipment which will meet these conditions so satisfactorily and with such ease of operation as this wonderful Motor Lawn Mower.



SPECIFICATIONS.

Width of cut, 25 inches.
Diameter of cutter reel, $6\frac{1}{2}$ inches.
Four revolving knives, crucible steel, $1\frac{1}{4}$ inches wide.
Bed knife, tool steel cutting edge.
Wooden roller, $2\frac{1}{2}$ inches in diameter.
Side frame, malleable iron.
Traction drum, wrought steel.
Handle, heavy wrought steel, full braced, 4 feet long.

Cut adjustment, $\frac{1}{2}$ to 2 inches.
Cutting speed, 2 to 3 miles per hour.
Cutting capacity, 5 acres per day.
Climbs 35 per cent. grade.
Gasoline consumption per day, about one gallon.
Length over all, $6\frac{1}{4}$ feet.
Weight, 245 pounds.
Shipping weight (crated) 320 pounds.

MOTOR.

Single cylinder, four cycle, enclosed, water cooled, radiator system.
Bore, 3-inch.
Horse power, A. L. A. M. rating, $3\frac{1}{2}$.
Stroke, 3-inch.

Speed of motor controlled by governor.
Ignition by high tension magneto.
Traction roller and cutter reel controlled by separate expanded ring clutches.

PRICE, \$275.00.

MANUFACTURER'S WARRANTY.

We warrant each new Fuller & Johnson Motor Lawn Mower manufactured by us to be first-class in material and workmanship, to be in perfect running order when leaving the factory and to run properly if given reasonable care and attention.

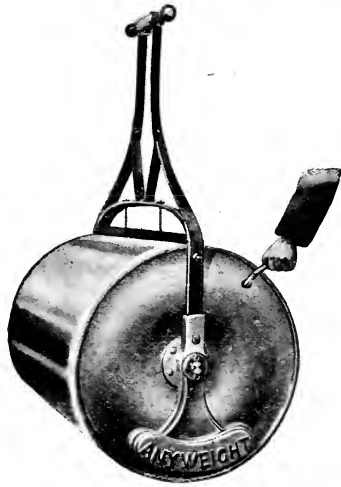
We furthermore warrant each Fuller & Johnson Motor Lawn Mower to be free from defects in material and workmanship, and will replace, free of charge, at our factory any parts proving defective in material and workmanship, within one year of date of purchase, upon the defective part being delivered to us for inspection to factory, at Madison, Wis., transportation charges prepaid.

It is understood that we are not to be held responsible for the failure of the Motor Lawn Mower to operate successfully if the instructions furnished with the machine are not followed, nor for injury due to accident, carelessness or abuse.

Prices subject to change without notice. (See note on page 2.)

"ANYWEIGHT" WATER BALLAST LAWN ROLLERS.

ALL IN ONE { A Light Machine for the Soft, Wet Spring Lawn
A Heavy Machine for the Dry, Hard Summer Lawn } GUARANTEED.
A Heavier Machine for Walks, Drives, Tennis Court



Winter frost and spring thaw heave and crack the sod. Tender grass roots are cut off from subsoil base of supplies—are exposed to death from sun and air. Only light weight roller pressure will properly reset them. Summer sun and wind quickly dry out the top soil. Perfection in shallow growing plant life then depends on the capillary action maintained only by frequent heavy weight rollings. The luxuriant stand of grass which follows intelligently applied rollings is in itself death to weeds. The roller so disturbs moles, ants and similar enemies of the lawn that they soon migrate to other fields. The rolled lawn is the smooth lawn—easy to mow. It's the soft, springy turf of deep green—the best on the street. Try the ROLLER MEDICINE—it's better, cheaper and quicker than watering.

GENERAL DESCRIPTION.

"Anyweight" Water Ballast Lawn Rollers have steel handles, roller bearings, acetylene welded drums with anti-turf-tearing, rounded edges, non-rust sheet water entrances. The most efficient and easiest running roller made.

Catalog No.	No. of Drums.	Diameter of Drums.	Width of Drums.	Rolling Width.	Weight Empty.	Weight Filled with Water.
1824	1	18½ in.	23½ in.	23½ in.	76 lbs.	274 lbs.
2424	1	23½ in.	23½ in.	23½ in.	94½ lbs.	418 lbs.

THE FAIRFIELD LAWN SWING.

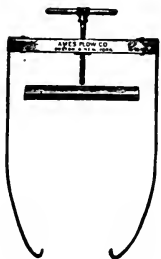
This swing easily takes precedence over all others in the market. Made of clear mountain spruce. Mechanical perfection, durability and ease of operation are combined in its construction.

<i>Favorite, 2 passenger.....</i>	} <i>Price quoted on application.</i>
<i>Fairfield No. 5, 4 passenger.....</i>	
<i>Fairfield No. 7, 4 passenger.....</i>	
<i>Extra heavy for parks.....</i>	



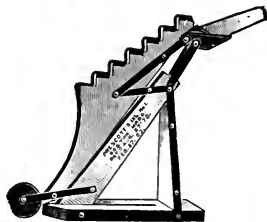
BARREL HEADER.

This is the most simple labor-saving machine ever invented for heading up barrels, and is used extensively for heading up apples, fish and other merchandise.



Price (1-inch screw). \$3.25.

CARRIAGE JACKS.



Price, \$2.25 to \$4.50.

STORE AND BAG TRUCKS.

MADE OF HARD WOOD AND WELL IRONED.

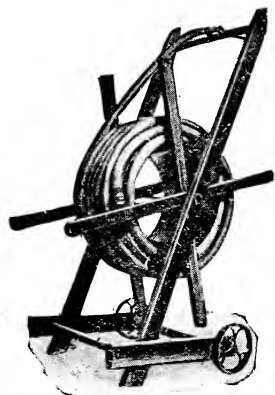
RUBBER TIRED WHEEL for hotel use.



Price, \$4.00 to \$10.00.

Prices subject to change without notice. (See note on page 2.)

HOSE REELS.

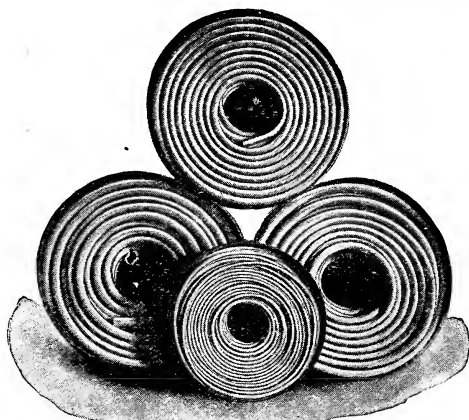


Made from hard wood or with steel frame. Strong, well bolted together, and durable.

Price.

\$1.00 to \$2.50.

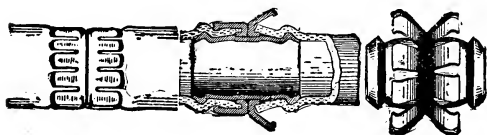
Garden and Lawn Hose.



HIGH GRADE RUBBER AND COTTON HOSE.

All sizes. Prices on application.

PERFECT HOSE MENDER.



A one-piece article of solid brass, made of very best quality of material, with tube and clamps stamped out in one piece, making a continuous tube. All that is needed is a hammer to bend down the clamps on the hose to make a perfect mend. The mend is neat, smooth, durable and absolutely water tight. Made for both $\frac{1}{2}$ -in. and $\frac{3}{4}$ -in. hose.

Price, 10 cents each.



EVEN-SPREAD LAWN SPRINKLER.

At last! The sprinkler that every lawn owner has been looking for. Sprays the water over greater radius than any other; throws an equal amount on each square foot within the immense circle, just like rain; elevates it only three to four feet above ground, preventing the wind blowing it to one side, and yet does not cut it into a fine mist to be lost in the air. May be returned if not satisfactory. **Price, postpaid, \$2.50.**

Fountain Lawn Sprinkler.

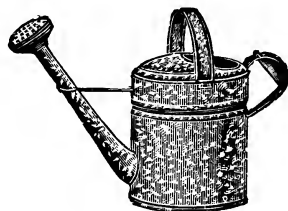


Made of brass. Easily moved over the lawn without turning off the water.

Price, 75 cents.

Water Sprinkler.

1 qt.	paintd tin,	\$.50
2 "	" "	.55
4 "	" "	.75
6 "	" "	.85
8 "	" "	1.10
4 "	galv. iron,	.90
6 "	" "	1.00
8 "	" "	1.20
10 "	" "	1.40
12 "	" "	1.50
16 "	" "	1.90



All our sprinklers are made with movable heads, which unscrew with an eighth turn. The screw is of zinc and will not rust.

Prices subject to change without notice. (See note on page 2.)

GRASS HOOKS.

All sizes. All kinds.

Price, 50 cents to 80 cents.



GARDEN REELS.

GARDEN LINES.

THREE PIECE FLORAL SET.

This is a set made for real work and of the same quality as our regular garden tools, and consists of a shovel, hoe and fork.

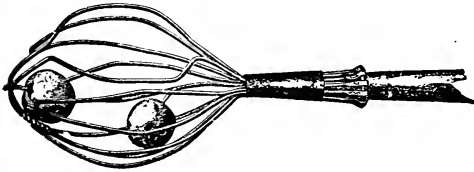
Price, \$1.65.

CAST STEEL GARDEN TROWELS.



Prices.

6-inch Primrose	15 cents
6-inch extra solid steel blade and shank	60 cents
7-inch extra solid steel blade and shank	65 cents



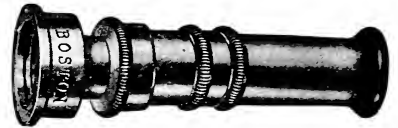
WIRE FRUIT PICKER.

Price, 60 cents.

BOSTON HOSE NOZZLE.

Gives a straight stream, fine or coarse spray.

Price, 85 cents.

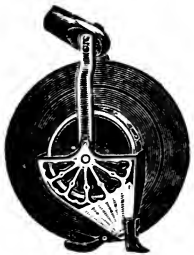


The Eureka Seed Drill.

For Kitchen Garden and Hotbed.

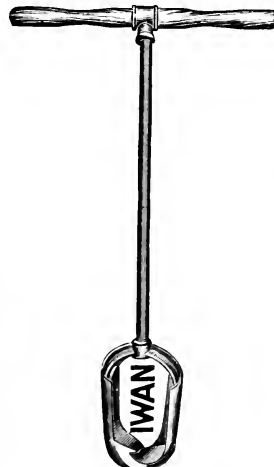
Will sow and cover beets, cabbages, carrots, celery, lettuce, onions, radishes, spinach, turnips, etc.

Price, \$1.75.



IWAN POST AUGER.

Why You Should Buy an Iwan.

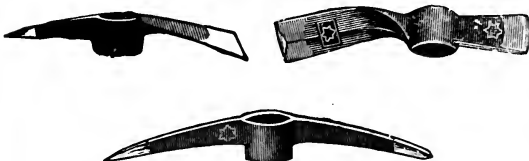


Large cutting surface.
Great durability.
Light pressure needed.
Works satisfactorily on wet or dry ground.
Easily emptied.

Price.

4-inch	\$2.50
6-inch	2.50
8-inch	2.75

PICKS AND MATTOCKS.



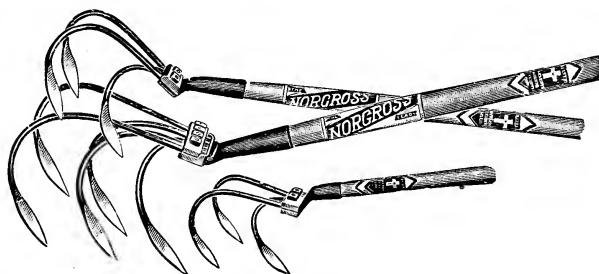
Prices subject to change without notice. (See note on page 2.)

"NORCROSS" CULTIVATOR-HOES AND WEEDERS.

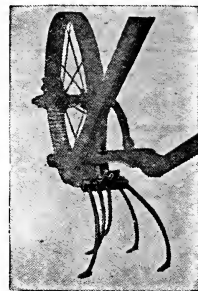
"No Garden too Small for a 'Norcross' Tool"



Use on 4-foot Handle as shown in cut.



Use on Handle or Attach to a Wheel Plow.



Attach 5-Prong Style to wheel Plow.

"Norcross" Cultivator-Hoes and Weeders work closer to plants without injuring them than any other garden implement known, leaving the soil level, loose and untrampled. Detachable steel prongs, malleable head. Finish black, silver bronzed shovels. Handles finest grade ash.

5-Prong, 4-Foot Handle, Weight 3 Pounds, Price, \$1.40.

The "Norcross" 5-prong is the only cultivator-hoe having detachable ferrule whereby handle may be detached, and by means of "Norcross" universal connection (10 cents extra) cultivator may be used as a wheel plow attachment.

3-Prong, 4-Foot Handle, Weight 2 Pounds, Price, 95 cents.

The "Norcross" 3-prong is a modification of the 5-prong, in size, weight and price, being especially suited to women who tend garden and all who prefer a light weight tool and for cultivating between extremely narrow rows.

"Midget," 9-Inch Handle, Weight 12 Ounces, Price, 50 cents.

The "Norcross" Midget is unequalled for close cultivation in flowers, low shrubbery and garden. Unlike cheaply made one-piece malleable weeders, it is made and finished the same as our cultivator-hoes.

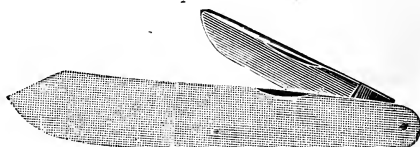
PRUNING AND BUDDING KNIVES.

All knives thoroughly well made; strong handle, extra quality steel blades.



PRUNING KNIFE.

Price, \$1.50 to \$2.00.



BUDDING KNIFE.

Price, \$1.00 to \$1.50.

SCYTHES.

GRASS SCYTHES.

(32 inches to 36 inches in length.)

BUSH SCYTHES.

BRAMBLE SCYTHES.

SCYTHER SNATHS.

ASH GRASS SCYTHER SNATHS.

CHERRY GRASS SCYTHER SNATHS.

ASH BUSH SCYTHER SNATHS

Prices subject to change without notice. (See note on page 2.)

FARM AND GARDEN TOOLS.

Complete Assortment of All Tools Constantly on Hand.



Field Hoe.



Manure Fork.



4 Tined Hay Fork.



Toothed Hoe.



Spading Fork.



3 Tined Hay Fork.



Warren Hoe.



Potato Hook.



Turf Edger.



Steel Garden Rake.
(Bow Shank.)



Wire Lawn Rake.



Scuffle Hoe.



Steel Garden Rake.



D Handle Round Point Shovel.



Solid Steel Scoop.



D Handle Square Point Shovel.



Wire Potato Scoop.



D Handle Spade.

Hoes—Garden, Field, Meadow, Scuffle, Ladies', Boys', Nurserymen's, Onion, Warren, Boothby, Humphrey, Stable, Street and Mortar.

Forks—Hay, Barley, Manure, Spading, Ensilage, Coke, Fish, Potato and Stone Picking.

Hooks—Potato, Manure, Clam and Nurserymen's.

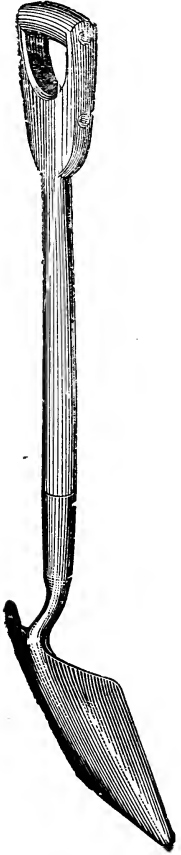
Rakes—Garden, Lawn and Gravel, in steel, malleable iron and wire.

Turf Edgers and Sod Lifters.

Write for quotations on tools of every variety.

Prices subject to change without notice. (See note on page 2.)

STEEL SHOVELS, SPADES AND SCOOPS



Maynard's Solid
Steel Socket
Shovels and Spades.



Post
Spoon.



Long Handle
Square Point
Shovel.

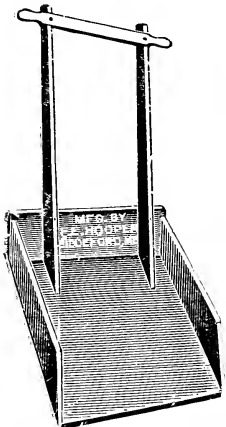


Long Handle
Round Point
Shovel.



Wooden
and
Steel
Snow
Shovels.

THE HOOPER SNOW SHOVELS.



For Railroad Cross-
ings and Platforms, Ice
Ponds, Mill Yards, Flat
Roofs, Concrete Walks,
and General Shoveling.

PRICE.

2 feet,	\$5.00
2 feet, 6 inches,	5.25
2 feet, 9 inches,	5.50



Cucumber Wood Pumps.

Pump Curbs, Pump Fixtures,
Tubing,
Chain and Rubber Buckets.

Finished Ox Bows.

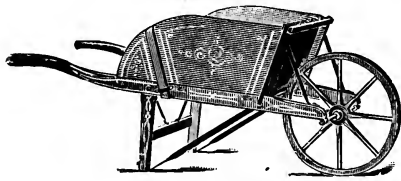
Made from fine second growth
hickory, shaved by hand, and
smoothly finished.

PRICE.

Per Pair, 2 1-4 in.,	\$1.75
" " 2 in.,	1.65
" " 1 3-4 in.,	1.50
" " 1 1-2 in.,	1.40

Prices subject to change without notice. (See note on page 2.)

WHEELBARROWS.



GARDEN BARROW.

No. 64. K. & W. Garden Barrow.

No. 65. K. & W. Garden Barrow.

No. 5. Custom made Garden Barrow.

CANAL BARROWS.

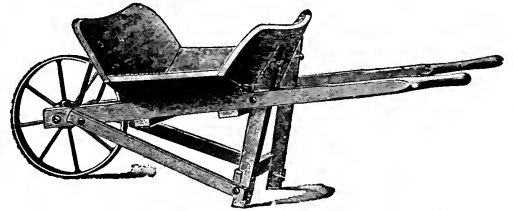


STEEL TUBULAR CANAL BARROW.

Wood Tray.

Steel Tray.

All Steel.



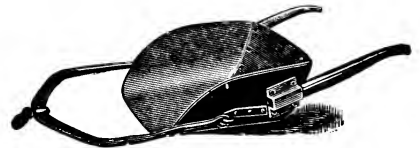
CANAL BARROW.

Write for prices.

STEEL ROAD SCRAPERS.

Made of heavy steel plates, cut from a single sheet pressed cold, lapped and riveted at the corners, giving greatest strength where needed. Special steel is used in the bail, and they are hung so as to handle easily.

Heavy shoes or runners are used to stiffen the bottom, and all scrapers are shipped with runners, unless otherwise ordered.



Price on application.

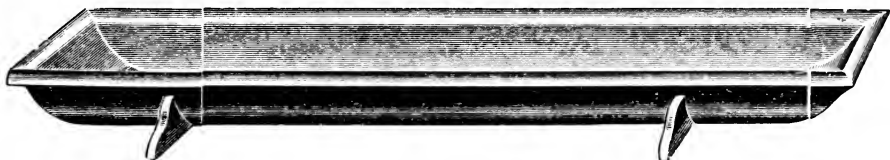
STEEL HEAD FOR DRAG.



This illustration shows a simple device whereby a drag can be readily made by using **STRAIGHT plank**. We also furnish the drag complete as shown above.

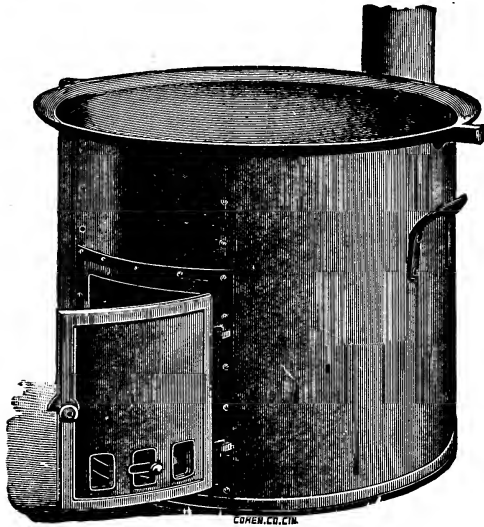
Price on application.

CAST IRON HOG TROUGHS.



Price on application.

Prices subject to change without notice. (See note on page 2.)



Farmer's Boiler and Feed Cooker.

(WOOD BURNING.)

Heavy cold rolled steel furnace; extra large feed door; malleable iron handles, firmly riveted on; strong, durable, economical and cheapest feed cooker on the market.

The kettles are of smooth, heavy cast iron, and will last a lifetime. The furnace jacket is of heavy cold rolled steel and very durable. Door, frame and flue collar cast iron.

Is designed to set on the ground, or on brick foundation and is especially adapted for cooking feed, rendering lard, making soap, scalding hogs and poultry, and all work of this nature. Cast-iron flues are constructed inside, retaining the heat and greatly economizing fuel.

Capacity.	Diameter of Furnace.	Capacity.	Diameter of Furnace.
15 gals.	20 $\frac{1}{4}$ inches	55 gals.	32 inches
22 gals.	23 inches	65 gals.	34 inches
30 gals.	26 inches	75 gals.	36 inches
35 gals.	28 $\frac{1}{2}$ inches	90 gals.	38 $\frac{1}{2}$ inches
40 gals.	29 $\frac{1}{2}$ inches	110 gals.	43 inches
50 gals.	31 $\frac{1}{2}$ inches		

Price on application.

"Farmer's Favorite."

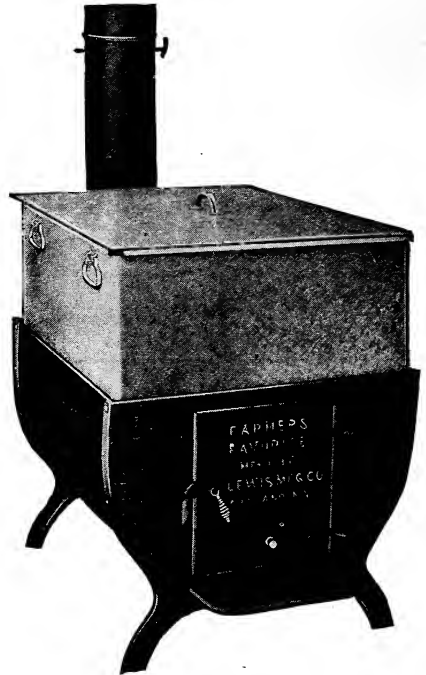
The top section, or boiler, is made of heavy galvanized steel that will not rust, and is also provided with four heavy tinned malleable iron drop handles.

This sets down inside the lower section one inch, thus making it impossible for the boiler to slip to one side and tip over, as when on top of furnace.

The lower section, or furnace, is made with cast iron ends, and the center, or body, of heavy steel plate.

With this construction the entire surface of the boiler is exposed to the heat, thus making it a very quick heater.

The door is extra large, which will allow large chunks and knots to be used without the labor of splitting.



	Capacity.	Size Boiler.	Length Fire Box.
No. 1	25 gallons	22x22x12	24 inches
No. 2	30 gallons	22x24x13 $\frac{1}{2}$	24 inches
No. 3	40 gallons	22x30x14	30 inches
No. 4	50 gallons	22x36x15	36 inches
No. 5	75 gallons	22x48x17	48 inches

Our prices are for the cooker complete, consisting of stove, or firebox, galvanized steel boiler with four handles and cover, one length of 6-inch stove pipe and damper, and one 6-inch elbow.

GRINDSTONES.

SAMSON, MOUNTED.

Frame of hard wood, securely bolted together, and fitted with both treadle and crank. The stones are of fine quality, from 22 inches to 26 inches in diameter.

WE ALSO CARRY A LINE OF

UNMOUNTED STONES,

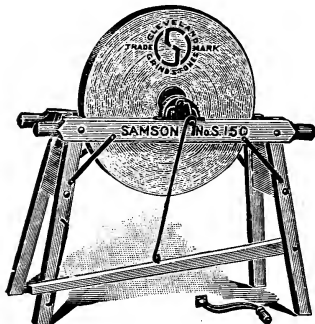
from 18 to 30 inches in diameter,

ALSO

Scythe Stones of Various Kinds and Grindstone Fixtures.

Write for prices.

Prices subject to change without notice. (See note on page 2.)





Corner Manger.

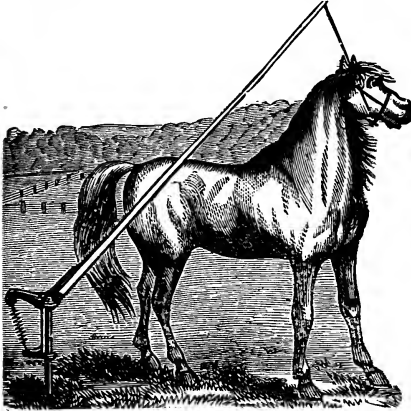


Feed Rack.

IRON CORNER FEED RACKS AND MANGERS.

WRITE FOR PRICES.

ANIMAL TETHER.



Price, \$4.00.

GALVANIZED IRON BUSHEL BASKETS.

These baskets are made of galvanized iron, and are furnished with malleable iron handles. Strong, durable and useful.



Price, \$1.50.

FEED BAGS.

MADE FROM
HEAVY CANVAS.

PLAIN
or with
BRIDLE.

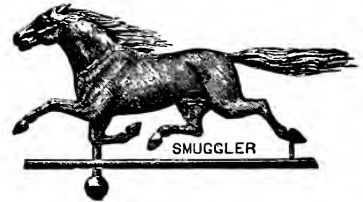
Price,
60c. to \$1.25.



WEATHER VANES.

All our vanes are made of copper and gilded with 23-karat gold-leaf that will remain bright for years. The vanes include iron spire with steel spindle, points of the compass and gilded balls and letters.

Descriptive Circular and Price List on Application.



HAY KNIFE.



Price, \$1.50.



WELL BUCKETS.

Made from oak, heavily
hooped.

—ALSO—

Light and heavy weight
Buckets made from
galvanized iron.

BULL RINGS.

Copper and Steel.



Price, 15c. to 45c.



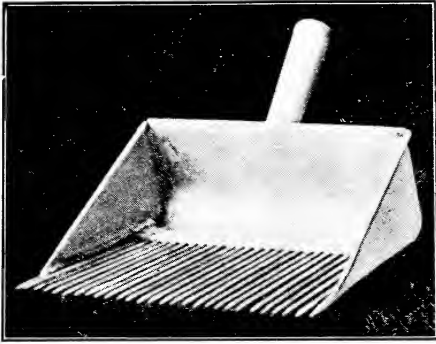
CLOUGH'S ADJUSTABLE SIEVE.

In offering this adjustable sieve to farmers and others, we know that they will find it useful and valuable for separating foul seeds from grain, and sifting out the small grain, thereby getting the most vigorous kernels for seed; also for cleaning and sorting beans, peas, etc.

Price, \$3.00.

Prices subject to change without notice. (See note on page 2.)

BLUEBERRY PICKER.



This picker is made from the best quality of heavy tin, and fitted with points made from highest tempered steel spring wire. The points are thoroughly soldered, making a very substantial and convenient picker.

Made in the following sizes:

18 point,	.	.	.	.	.	.	\$2.85
20 "	.	.	.	.	.	.	3.00
24 "	.	.	.	.	.	.	3.15
26 "	.	.	.	.	.	.	3.35
28 "	.	.	.	.	.	.	3.75
30 "	.	.	.	.	.	.	3.90

The following sizes are more heavily constructed, with handle inside, and with higher back.

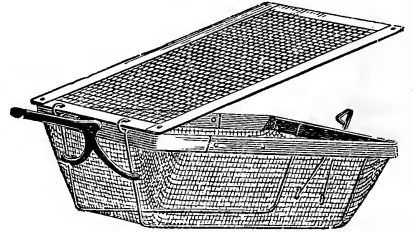
32 point,	} Price on application.
36 "	.	.	.	.	.	.
40 "	.	.	.	.	.	.

CORN POPPERS.

Firm and well braced popper with detachable handle, and with wire guards to protect bottom of popper from wear.

PRICE.

1 quart,	25c.	2 quart,	35c.
1 1-2 quart,	30c.	4 quart,	70c.
8 quart (factory size), \$4.25.			

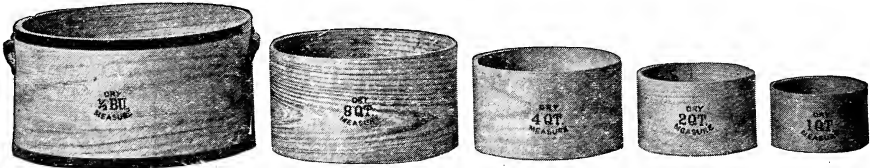


"K. & W."

WHITE RICE POPPING CORN.

Finest quality, tender and crisp. Pops out snow white. Sold both shelled and on the ear. Special price to users of large quantities.

WOODEN MEASURES.



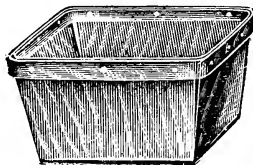
In sets of 1, 2, 4, 8 and 16 quart sizes.

Price per set, \$4.15.

BERRY BASKETS.



Oblong Pint.

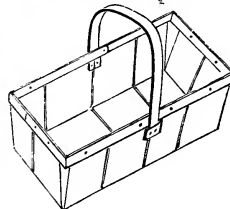


Quart.

Our berry baskets are made of best quality clear wood and put up in good strong crates. Packed 1,000 in a crate.

Write for prices.

VERBENA BASKETS.



With wood or wire handle. 10 inches long; 5 inches wide; 3 inches deep.

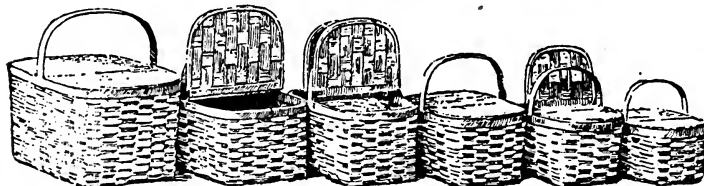
Wood handle. 12 inches long; 7 inches wide; 4 inches deep.

Special prices quoted for large quantities.

Prices subject to change without notice. (See note on page 2.)

BASKETS

OF EVERY SIZE AND STYLE FOR
FACTORY, MILL, STORE AND FARM.
Corn Packers' Baskets a Specialty. Write for Quotations.



Ash-Covered Lunch Baskets.

One or Two Bail, Ash-Covered Lunch Baskets.

No. 0.....	\$2.50	No. 4.....	\$1.25
No. 1.....	2.35	No. 5.....	1.10
No. 2.....	1.90	No. 6.....	1.00
No. 3.....	1.75	No. 7.....	.95



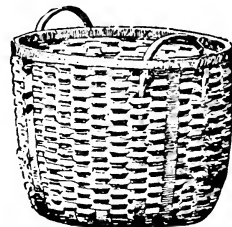
Hole-Handled Market Baskets.



Bail-Handled Market Baskets.

Solid Oak Market Baskets, with Bail, Hole or Block Handle Strapped.

No. 0.....	\$1.50	No. 2.....	\$.85
No. 1.....	1.30	No. 3.....	.75



Oak Splint Basket.

No. 1, 6 bush., solid oak, nailed rim	\$10.00
No. 1, 5 " " " " " "	7.50
No. 1, 4 " " " " " "	6.80
No. 1, 3 " " " " " "	5.00
No. 1, 2 " " " " " "	2.85
No. 1, 1 " " " " " "	1.65
No. 0, 1 " " " " " "	1.15



1-2 bush. Basket. 1-4 bush. Basket.

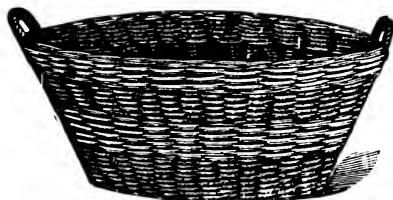
$\frac{1}{2}$ bush., solid oak, nailed rim, stiff bail	\$1.10
$\frac{1}{4}$ " " " " " " "	.85
$\frac{1}{2}$ " " " " " " drop	1.60
$\frac{1}{4}$ " " " " " " " "	.75



THE HOLDEN ASH STAVE BASKETS.

One of the smoothest, strongest and best baskets for farmers and grocers. Made in every size from $\frac{1}{4}$ bushel to 4 bushels.

Write for quotations.



Oval Willow Clothes Basket.

OVAL WILLOW CLOTHES BASKETS.

Small.....	\$1.85
Medium.....	2.25
Large.....	2.50

OBLONG ASH CLOTHES BASKETS.

Small.....	\$1.75
Medium.....	2.40
Large.....	3.00

Barrel Basket.
55 cents.

ROUND TIN DINNER PAILS.

Made from good quality polished tin, complete with pie tray and cup, with seamless outside cover.

Price, \$1.75 each.

Prices subject to change without notice. (See note on page 2.)



HIGH GRADE SCREEN DOORS AND WINDOW SCREENS.

OUR SCREEN DOORS are square mortised and tenoned joints throughout, making the strongest and best construction possible.

The wire cloth is placed on the screen door by special machinery, which stretches the cloth drumhead tight. The wire cloth is pressed into a groove in the wood and covered with a flush beaded moulding mitered at corners, which prevents the cloth from becoming loose and baggy.

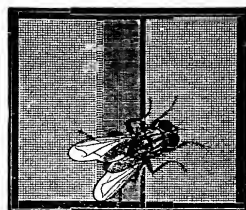
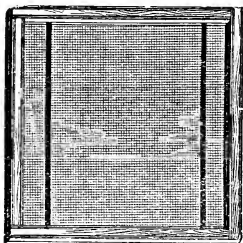
Adjustable Window Screens.

The "Hummer"

guaranteed to have perfect adjustment. Wire cloth is securely fastened to frame, and covered with moulding. Material used is best hard wood, finished in oil, both sides alike.

The "Sherwood" Screen.

is an all-metal frame made of pressed steel. The wire cloth is drawn tightly and locked securely in the frame. Operates easily in all kinds of weather.



Continental Sanitary Window Ventilators

Fresh Air
Without
Drafts, Dust,
Rain or Snow



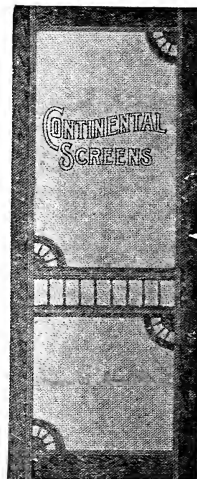
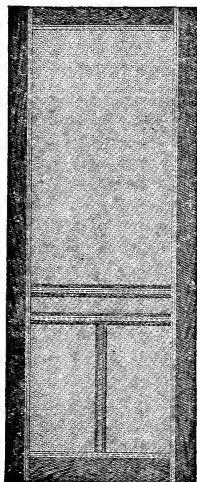
For Bed Rooms,
Living Rooms,
Bath Rooms,
School Rooms,
Hospitals,
Offices, Etc.

A specially treated cotton fabric of fine mesh. Keeps out all drafts, dust, rain and snow, but permits a constant circulation of fresh air. The frame is of hard wood, adjustable to fit any ordinary window opening.

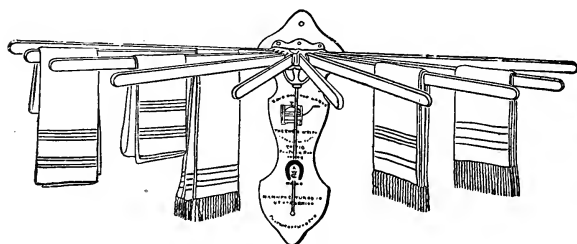
No. 93. 9 inches high, adjustable 23 to 37 inches wide.

No. 183. 18 inches high, adjustable 23 to 37 inches wide.

Write for quotations.



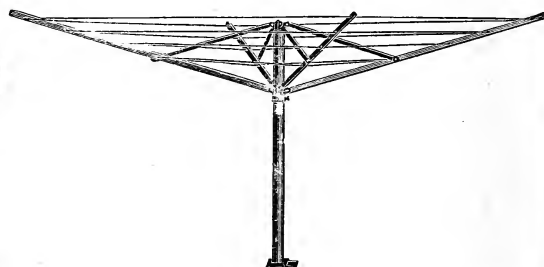
Empire Folding Wall Dryers.



Price, \$1.50.

Advance Clothes Dryers.

The Best Clothes Dryers in Use.



Balcony Dryers, - \$16.00 No. 1. 120 ft. line, \$9.00. No. 2. 160 ft. line, \$9.25.

Prices subject to change without notice. (See note on page 2.)



"K. & W." Sanitary Sweeping Compound.

Can be used on carpets, rugs, linoleums, mattings, tile and wood floors; is economical, non-inflammable, and *absorbs* the dust, thereby preventing the scattering of disease germs.

This powder is mixed by machinery only, and is composed of a special wood pulp combined with absorber and silica, which gives it its cleansing property. There is *no sand* used, the grit which is noticeable being silica. The oil of cedar, which is used as a disinfectant, is one of the best known to medical science. This powder always runs uniform, will cover a large area, and its use is recommended in every home, public building, store and factory.

PRICE.

50 pound keg,	.	.	.	.	.	.	.	\$2.00
100 pound keg,	.	.	.	.	.	.	.	3.50

Special quotations on large quantities.

O'CEDAR POLISH

AND DUSTLESS MOP.

The one **perfect** polish for pianos, automobiles, furniture, hard wood floors, and all waxed, varnished and polished surfaces, as it **will not gum**, and aside from its high lustre, it is a dust allayer, a labor saver, and clean and sanitary in every particular.

Price O'Cedar,	4 oz. bottle,	.	.	.	.	.	.	.	.	\$ .30
	12 " " "	.	.	.	.	.	.	.	.	.60
	Quart can,	.	.	.	.	.	.	.	.	1.25
	Half gallon can,	.	.	.	.	.	.	.	.	2.25
	One " " "	.	.	.	.	.	.	.	.	3.00

Price O'Cedar Mops, No. 3 (triangular), \$2.00; No. 4 (triangular), \$1.50.



BROOMS, BRUSHES AND DUSTERS,

AND A LARGE VARIETY OF WOODEN WARE OF ALL KINDS.

20th CENTURY BARREL PUMP.

FOR VINEGAR.



Made from chemicalized wood and is strictly non-corrodible; does away with the slow, leaky faucet; will pump the liquid at the slightest stroke of the piston.

Price, \$2.75.

STONE WARE.

ALL SIZES OF
**Stone Pork Barrels, Butter Pots,
Bean Pots, Preserve Jars,
Jugs and Churns.**

Write for Price List.



Bean Pot.

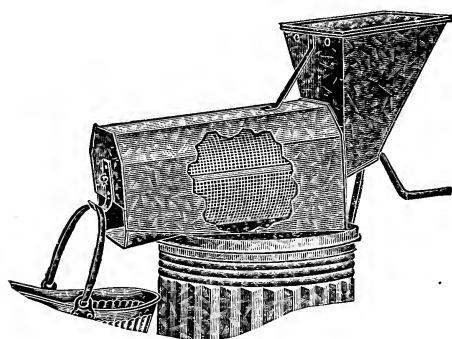


Pork Barrel.



Butter Pot.

Prices subject to change without notice. (See note on page 2.)



THE NATIONAL.

THE NATIONAL ROTARY ASH SIFTER.

In galvanized iron case. No dust. Works easily, quickly and well.

Will fit 18-inch iron can or flour barrel.

Price, \$5.00.

THE FAVORITE ASH SIFTER.

Wooden rim, with heavy wire bottom.

Price, \$1.10.

THE "LOWELL" ASH SIFTER.

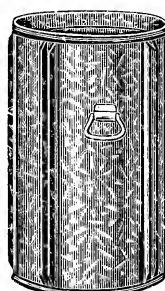
This is an all wire sifter, sifting the ashes through the sides as well as the bottom.

Price, \$1.25.

GALVANIZED IRON ASH BARRELS.

Solid, heavy barrels. No danger from hot ashes.

Price, No.	04, 17x26,				\$4.25
"	"	0190, 18x26, ribbed,			6.00
"	"	190, 18x26, extra heavy ribbed,			8.00



No. 190.



No. 04.



GALVANIZED IRON PAILS.

10 quart,	\$.55
12 "	.65
14 "	.70
16 "	.85
10 " extra heavy,	1.00
12 " " "	1.10
14 " " "	1.15
16 " " "	1.35

GARBAGE PAILS.

Made from
Galvanized Iron.

No. 000, 3 $\frac{1}{4}$ gal.,	\$1.25
" 02, 6 $\frac{1}{2}$ "	2.00
" 03, 8 $\frac{1}{2}$ "	2.50
" 04, 9 "	2.85
" 40, 6 $\frac{1}{4}$ " heavy,	4.00
" 50, 9 $\frac{3}{4}$ " "	4.50



Galvanized IRON TUBS.

With wringer
attachment.

No. 11,	\$1.70
" 22,	1.85
" 33,	2.20
A Keelers,	.95
B " "	1.10
O " "	1.30

Galvanized Iron Coal Hods.

No. 515,	\$.85
" 516,	.90
" 517,	1.00
" 518,	1.10
" 156, heavy,	1.25
" 166, "	1.40
" 176, "	1.50
" 186, "	1.85



Prices subject to change without notice. (See note on page 2.)

MAJESTIC ROTARY WASHER.

The rotary is simple, strong, easy running and noiseless, the rotary motion being continuous, and the fly wheel heavy. Very little power is required to operate the machine. It is constructed of the **best white cedar**, and is strong and finely made.

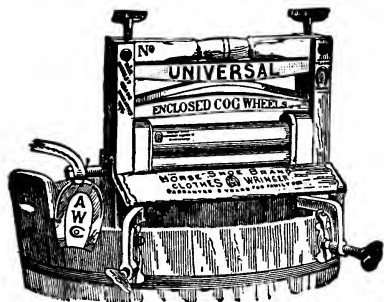
Price, \$14.00.

RICHMOND "HIGH-SPEED" WASHER.

Similar in construction to the Rotary, but is equipped to run very rapidly, smoothly and easily.

Price, \$18.00.

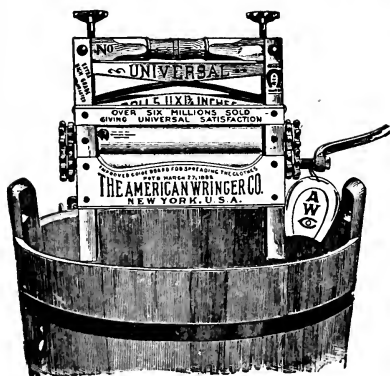
CLOTHES WRINGERS.



UNIVERSAL.

BEST KNOWN AND LARGEST SELLER.

Made either with regular bearings, ball bearings, or with enclosed gears.



TUB WRINGERS.

Universal,

Household,

Eureka,

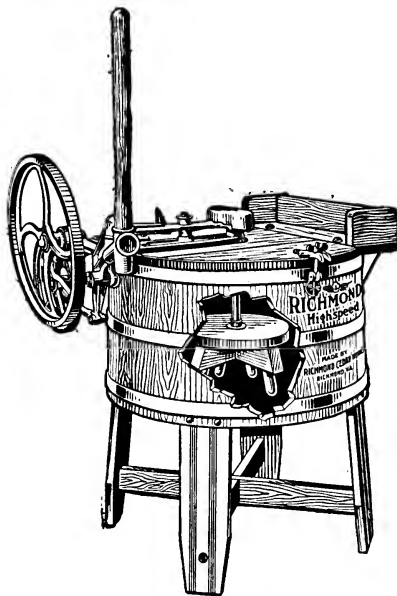
Daisy.

BENCH WRINGERS.

Universal,

Rival.

Write for prices.



HIGH SPEED.



Hotel Size.

WHITE'S

Patent Mop Wringers.

Will quickly wring a mop perfectly dry,
without touching mop with hands.

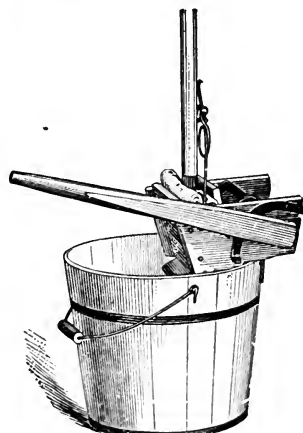
The wringer may be instantly attached to the pail and quickly removed.

Always place the wringer on the opposite side of pail from the bail.

Use mop made of any material desired. A short, thick mop is generally best liked, and is the best wrung by the wringer.

Price, Family Size, \$2.25

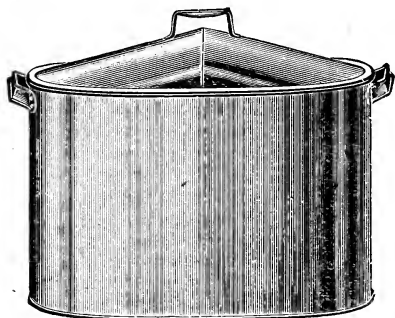
" Hotel " 3.75



Family Size.

Prices subject to change without notice. (See note on page 2.)

WASH BOILERS.



8-in. X, tin bottom,	\$2.50	9-in. X, copper bottom,	\$3.50
9-in. X, " "	2.65	8-in. Rome, all copper,	6.25
8-in. X, copper bottom,	3.25	9-in. Rome, " "	7.00

TEA KETTLES.

NICKEL
COPPER.

Price,
\$2.75.



OIL CANS.



5 Gal. Columbia Oil Can.

Price, \$1.85.



1 Gal. Polo Oil Can.

Price, 60c.

LARGE ASSORTMENT OF METAL AND GLASS OIL CANS,

holding from one to ten gallons each.

"K. & W." OIL TANKS.

For use where a considerable quantity of oil is kept. These tanks are fitted with a pump, and are safe, convenient and durable.

Price, 60-gallon tank,	.	.	.	\$12.50
" 110-gallon tank,	.	.	.	22.00



BOSS COTTON GLOVES.

Price.

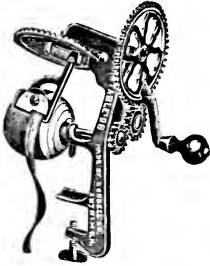


Full size; well made.
Good gloves for all kinds
of work, at a low price.

No. 871.....	35c. per pair.
No. 70K.....	22c. " "
No. 641.....	25c. " "
Jersey, No. 1.....	25c. " "
Jersey, No. 3.....	25c. " "
Gauntlet, Leather Palm, No. 320.....	50c. " "
Mittens, No. 320.....	30c. " "
Mittens, Leather Palm, No. 280.....	50c. " "

Prices subject to change without notice. (See note on page 2.)

APPLE PARERS.



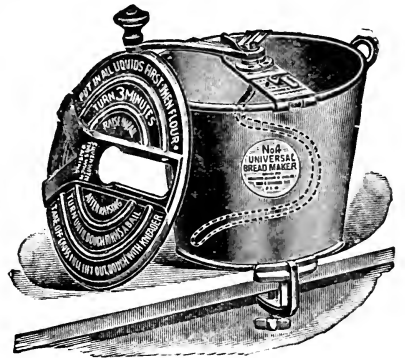
NO. '98. TURN TABLE.

Price, \$1.00.

THE UNIVERSAL THREE-MINUTE BREAD MAKER.

Bread Maker, Mixer, Kneader and Raiser all Combined.

Made of heavy tin and sheet steel. All parts tinned. No housekeeper who has once used it will ever be content to go back to the old, laborious, disagreeable way of making bread by hand. Very simple in construction. A child can operate it. As easily cleaned as a tin pail.



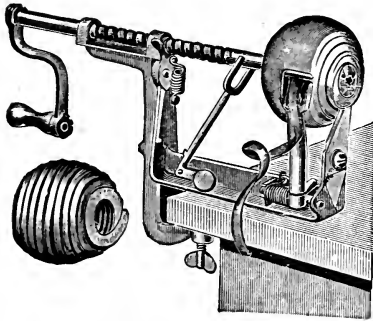
PRICE.

No. 2,	.	.	\$3.50
No. 4,	.	.	4.50
No. 8,	.	.	5.50
No. 44,	.	.	3.85

The Universal Food Chopper.

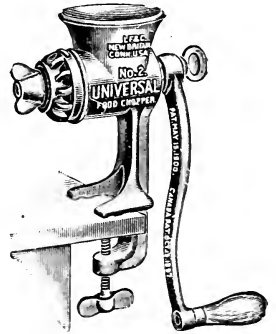
All Parts Tinned and Interchangeable.

Chops rapidly and without mash-
ing, and in pieces as fine or coarse as
wanted, all kinds of meat, fish, fruits,
eggs, bread and vegetables.



**GENUINE WHITE MOUNTAIN
PARER, CORER AND SLICER.**

Price, 75 cents.



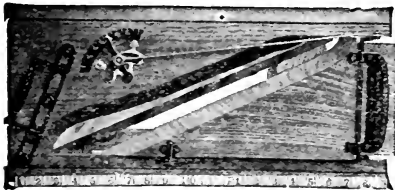
No. 2. Medium Family Size.

COMBINATION SLICER.

For slicing bread, dried beef, pressed meats, cabbage, pine apple, etc.

Instantly changed from a thick slice to the thinnest.

Price, \$4.75.



Lightning Butter Making Machine.

Designed especially for the purpose of merging milk and butter, making about two pounds of table butter from one pound of butter and one pint of milk. This is accomplished easily and quickly by the peculiarly shaped metal dasher. The propeller-like motion creates a tremendous agitation, mixing the butter and milk thoroughly in about one minute. Being made entirely of metal and glass this machine is easily and thoroughly cleaned, making it perfectly sanitary in every respect.



PRICE.

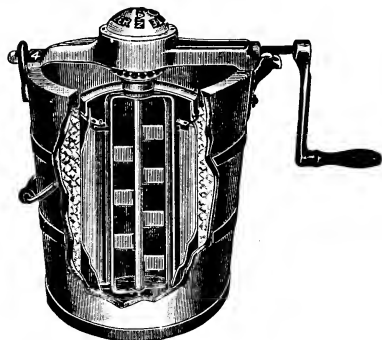
No. 1	(to make 1 pound of butter),	.	.	.	.	.	\$1.50
No. 2	" 2 " "	.	.	.	.	.	2.00
No. 3	" 4 " "	.	.	.	.	.	2.50
No. 4	" 6 " "	.	.	.	.	.	3.00

Prices subject to change without notice. (See note on page 2.)

ICE CREAM FREEZERS.

"WHITE MOUNTAIN."

Perfected by the introduction of an important feature of a **double self-adjusting wood scraping bar** attached to the duplex dasher. By means of this device the **actual time** of freezing cream has been very materially reduced.



The cut shows the construction and position of the mechanism of the White Mountain Freezer. The can moves from right to left, the outside beater moves from left to right, scrapes with its wooden bars the frozen cream from the can and throws it toward the center, where it is met by the floats of the inside beater moving in an opposite direction and returned to the inside surface of the can to be re-frozen. The triple motion thus induced keeps the cream constantly moving and insures every particle being smoothly and evenly frozen.

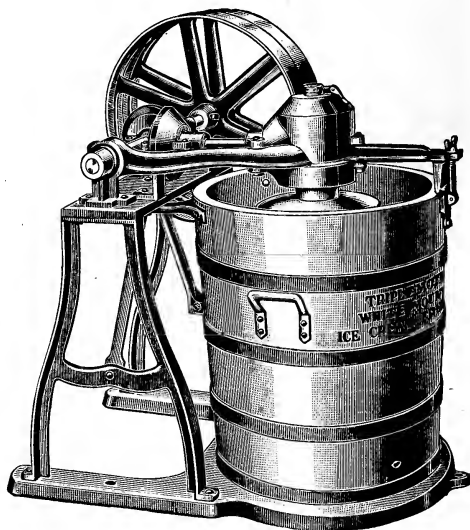
PRICES.

Junior, \$3.50	4 quart, \$7.75	12 quart, \$20.00
1 quart, 4.55	6 quart, 9.80	15 quart, 24.00
2 " 5.35	8 " 12.60	20 " 31.00
3 " 6.30	10 " 16.85	25 " 40.00

"WHITE MOUNTAIN" POWER FREEZERS.

Size 15, 20, 25 and 40 quarts.

The platform and stand are cast iron, nicely galvanized to prevent rust. When in use, the gear frame is fastened by latch bolt and thumb screw; when released it can be swung to either side, so tub and can may be removed. Equipped with either pulley or fly wheel, a good power machine is produced. The pulley is $15\frac{3}{4}$ x $4\frac{1}{2}$, and the freezer should be operated at a speed of seventy-five revolutions per minute.

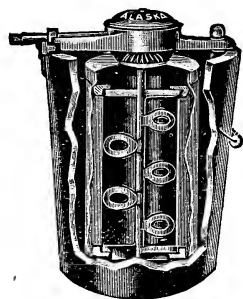


Prices
on
application.

"ALASKA."

The only freezer having the Perpetual Motion Aerating Spoon Dasher, with its spoon-shaped floats, open in the center like mixing spoons, which aerates, stirs and beats the mixture rapidly and thoroughly.

The cut also shows the new device attached to the under part of the gear frame or crossbar, which effectually protects the gearing and can cover from salt and ice.



PRICES.

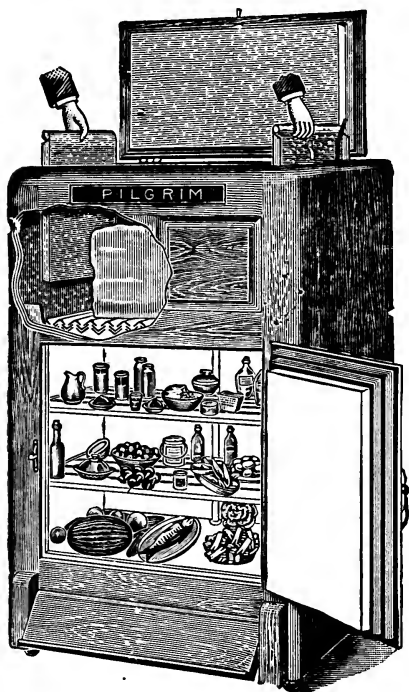
1 quart, \$4.25	6 quart, \$9.25	12 quart, \$19.80
2 " 5.00	8 " 11.88	15 " 24.50
3 " 5.85	10 " 15.80	20 " 30.00
4 " 7.00		

FREEZER CLAMP OR HOLDER.

A perfect device for holding the freezer firm and steady. Easily adjusted to the tub by means of thumb nuts. Price, 2 to 10 quarts, 35 cents; 12 to 25 quarts, 55 cents.

An Illustrated Catalog of Power and Fly Wheel Freezers, Repairs, and Tubs and Cans for Packing Purposes furnished on application.

Prices subject to change without notice. (See note on page 2.)



THE "PILGRIM"

Refrigerators and Ice Chests.

Thoroughly constructed from hard wood and beautifully finished. Cleanable and perfectly sanitary. The economy of ice is a very important consideration, and the consumption of ice will be much smaller in our refrigerators than in many others, and at the same time insure a low and even temperature and perfect circulation of cold, dry air.

GROCERS' REFRIGERATORS A SPECIALTY.

Send for Illustrated Catalog and Price List.

FRUIT JAR RINGS.



"K. & W." White Lightning, "K. & W." Red Combination (Wide Mouth and Mason), "Kold Pac," Gray (Wide Mouth), "Good Luck." Manufactured from highest grade rubber, and attractively packed in handsome colored containers.

1 dozen in each package.

FRUIT JARS.

GENUINE "LIGHTNING."

11 ounce, pint, 1 quart and 2 quart sizes.

EASY-SEAL ("E-Z").

1-2 pint, pint, 1 quart and 2 quart sizes.

Write for quotations.



All Genuine "Lightning" Fruit-Jars Bear Trade-Mark "Lightning"

JELLY TUMBLERS.



**BEST
QUALITY
CLEAR
GLASS.**

1-3 pint, packed 27 dozen to the barrel.

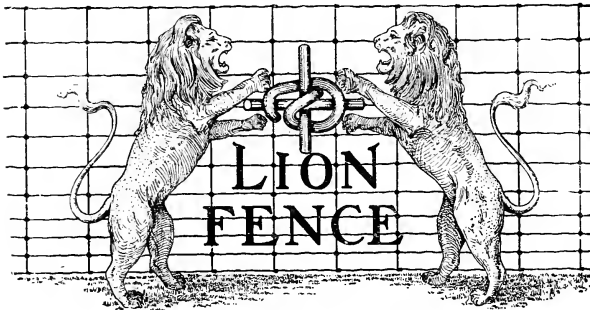
1-2 pint, packed 20 dozen to the barrel.

Prices subject to change without notice. (See note on page 2.)

Fences — PAGE-LION — Fences.

MADE BY

The OLDEST and BEST KNOWN FENCE COMPANY in the WORLD.



A Full Line LION FENCE. All Heights.

Fences for Every Purpose, to Suit Every Condition.

Large, Heavily Galvanized Wires, Made from Open Hearth Steel.

Straight, Continuous Cross Wires. No Wraps or Welds.

THE BEST FENCE FOR THE MONEY.

Best for Horses.

Best for Cattle.

Best for Sheep and Hogs.

Best for Poultry.

POULTRY

P 1848-32	18 bars, 48 inches, 32 stays per rod.	Spaced, 1½ 1½ 1½ 1½ 2 2 2 2½ 2½ 3 3½ 4 4½
	5 5 inches.	

P 2058-32	20 bars, 58 inches, 32 stays per rod.	Spaced, 1½ 1½ 1½ 1½ 2 2 2 2½ 2½ 3 3½ 4 4½
	5 5 5 5 inches.	

HOG

O 726-32	7 bars, 26 inches, 32 stays per rod.	Spaced, 3 3 3½ 4½ 5½ 6 inches.
O 832-32	8 bars, 32 inches, 32 stays per rod.	Spaced, 3 3 3½ 4½ 5½ 6 6½ inches.

CATTLE

O 635-16	6 bars, 35 inches, 16 stays per rod.	Spaced, 6 6 7 8 8 inches.
O 845-16	8 bars, 45 inches, 16 stays per rod.	Spaced, 4 5 6 6 7 8 8 inches.

Write for quotations.

Excelsior Poultry and Rabbit Fence.

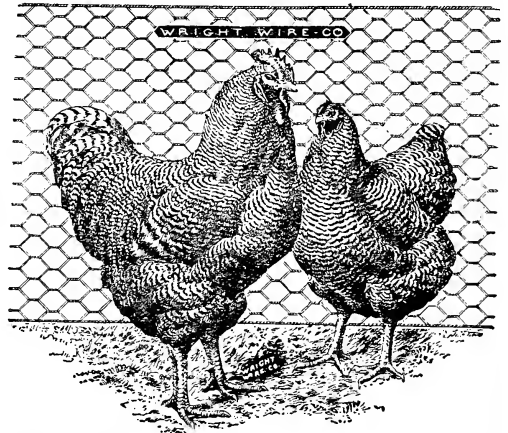
Similar to the Page fence, but of lighter wire. All wires are No. 19 gauge hard drawn tough steel, standing the highest breaking strain used in any fencing. The selvages consist of double No. 19 wires.

Galvanized Poultry Netting.

Made from No. 20 selected steel wire, galvanized *after* weaving. Made in 2-inch and 1-inch mesh, and of a superior, smooth finish.

This netting is put up in rolls containing 150 running feet each and in the following heights, 1 foot, 1½ feet, 2 feet, 3 feet, 4 feet, 5 feet, 6 feet.

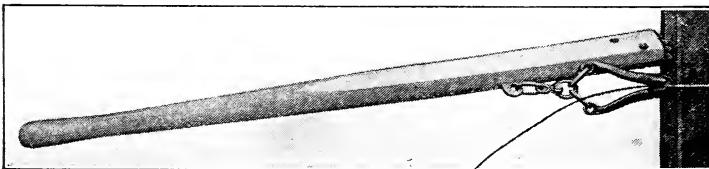
Write for prices.



THE TOWNSEND WIRE STRETCHER.

The Townsend Wire Stretcher is made with a wooden lever or handle three feet in length, to which is attached malleable iron pinchers, into which are riveted corrugated steel grips; warranted not to slip. It is a substantial and very durable implement.

Price, \$2.00.



Prices subject to change without notice. (See note on page 2.)

WE ARE AUTHORIZED AGENTS FOR CYPHERS COMPANY INCUBATORS, HOVERS AND BROODERS.

Incubators Made in One Style—Four Different Sizes.

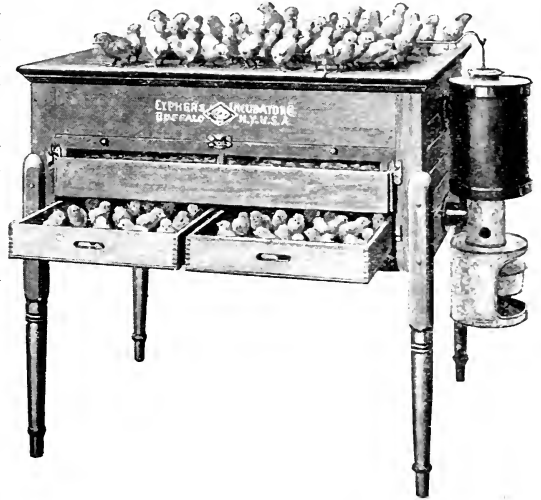
FOR THE SEASON OF 1921.

“STANDARD” CYPHERS INCUBATORS.

The **CYPHERS INCUBATOR** is known as the “business incubator of the age.” It has **won its way** in all parts of the world because it gives the **best results**. It is used on more Government Agricultural Experiment Stations, on more large practical poultry plants, on more successful egg farms, and by more prominent poultry fanciers than all other makes combined. It hatches a **larger percentage** of the eggs entrusted to it, and produces **larger, stronger, healthier** and more **vigorous** chicks and ducklings than any other incubator ever built. This is the Cyphers guaranty.

CYPHERS INCUBATORS are built to hatch **and to last**. With proper care—the same care you would give a valuable piece of household furniture—a Standard Cyphers will last an ordinary lifetime. They are guaranteed by us to last **ten years** without repairs. We make this guarantee because they **have lasted** much longer than this—and are still doing first-class work.

These are machines that for **twenty years** have been recognized as the “standard hatchers of the world.” Tens upon tens of thousands of them have been sold and are in **successful use in every civilized country on the globe**. They are the last word to date in incubator building, not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in **all climates**, under **widely different conditions**, in the hands of all sorts of people. Are built in four popular sizes and at prices as follows: 70 eggs, price complete, \$42.00; 140 eggs, price complete, \$51.00; 244 eggs, price complete, \$68.00; 390 eggs, price complete, \$85.00.



Standard Cyphers Incubator. Made in four sizes.

Illustration shows No. 3 Incubator, having 390 egg capacity

COLUMBIA HOT-AIR INCUBATORS.

Are built to meet the widespread demand for large capacity lamp-heated machines that can be sold at **surprisingly low prices** and yet be guaranteed to do high class work.

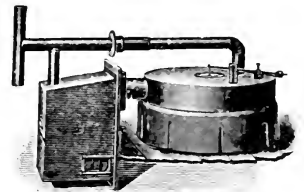
The incubator case is of wood **attractively** finished in Flemish green with brass trimmings. Walls are **double** with air space insulation.

Heater is fume proof, forced draft, asbestos covered and metal banded. Lamp bowl has **seamless bottom**. Burner is best on market for incubator use and chimney is of metal. Lamp support is readily adjustable.

COLUMBIA INCUBATORS embody the Cyphers Company patented **diffusive principle** of heat mixture and uniform circulation and are **self-ventilating**. 140 eggs, price complete, \$25.00.

CYPHERS ADAPTABLE HOVER.

The Cyphers Adaptable Hover is self-ventilating and self-regulating. It furnishes a continuous supply of **fresh, pure-warmed** air under the hover, and at the same time maintains a steady, uniform heat. All the essentials of successful brooding of chicks are automatically provided. Thousands of poultry growers use this hover in raising big, strong flocks of chicks. It is “adaptable” to use in colony coops, in portable houses, in home-made brooder coops, such as goods boxes, piano boxes and organ cases, as well as in large brooding houses. It is constructed entirely of non-combustible material. Capacity, seventy-five newly hatched chicks, or fifty chicks that are ten days to six weeks old. Price, \$21.50.



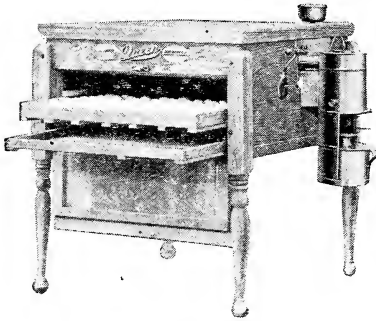
ALL METAL ADAPTABLE
HOVER.

(Self-regulating and bears insurance label as separate device.)

Prices subject to change without notice. (See note on page 2.)

STOP HATCHING WEAK CHICKS

With Cheap Incubators!



QUEEN.

A Queen costs but little more, and the extra chicks that live and grow soon pay the difference.

Remember, it is not how many chicks you hatch that counts, but how many you raise. Chicks that hatch out weak and wobbly, and live but a few days, mean nothing to you but trouble and loss. They make one sick of the poultry business.

Most of the chicks you lose in the first few weeks die because they did not have, when hatched, enough strength or vitality for a good start. Queen Incubators are famous the country over for big hatches of strong, healthy chicks that live and grow.

Proper Insulation.

The Queen is doubly insulated. First we use double walls of California redwood, forming a dead air space. Second, corrugated strawboard is used between the wooden walls. Proper insulation adds considerable expense to the manufacturing cost. However, it is an absolute requirement of a good incubator.

Queen Hot Water Heating.

The Queen system of hot water heating prevents the drying-out tendencies found in hot air incubators and provides a soft, uniform heat over every part of the egg chamber—a heat that is most natural for the hatching eggs. The circulation of water through the radiator prevents any moisture being added or taken away from the eggs. When it becomes necessary to remove the lamp, the hot water circulating through the radiator maintains an even heat within the egg chamber without the slightest variation.

Built of California Redwood.

The Queen is the only incubator that carries out the double redwood wall construction all around, and provides a double wall front, in the way of two separate doors. The outer door is a solid panel of redwood that is hinged entirely independent of the inner door and is fastened with a sash lock that draws it tight, thus making the loss of heat impossible.

The inner door is also of redwood construction, containing a panel of glass the full length and height of the egg chamber.

Redwood does not absorb the odor from the hatching eggs. Cheaper woods, and pasteboard lining in iron and tin machines, retain the odors, to weaken and kill the hatching chick.

Queen Incubators are not cheap, but they are cheap in the long run. They will be turning out good hatches years after the cheap machines have been junked.



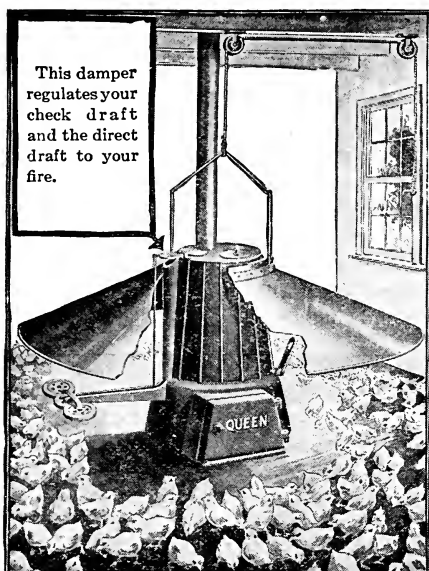
STYLE K.

QUEEN.

STYLE K.				QUEEN.			
No. 20,	70 eggs,	.	.	No. 4,	275 eggs,	.	\$51.50
No. 21,	130 "	.	.	No. 5,	400 "	.	65.00
No. 22,	220 "	.	.				

Prices subject to change without notice. (See note on page 2.)

QUEEN BROODERS.



The Queen Colony Brooder is a new and improved design of brooder stove. It is made of highest quality iron castings that will wear and last indefinitely.

There are no drafts on the smoke pipe of the Queen. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to increase the fire is located at the top of the stove, it opens into the fire at the base through an opening extending down the side to the bottom. This feeds the draft into the fire from underneath with no opening below the hover.

As will be seen from the illustration, the check and draft lids are cast together and operated together. Thus, when the fire is too hot, the wafer expands and closes the draft and opens the check, both at the same time. When it is too cool, the wafer contracts and closes the check and opens the draft. This keeps an even heat all the time, both night and day, in cold weather or warm, and does it automatically. You don't have to pay any attention to it whatsoever. Just set the regulator for the proper temperature at the start of the season—it will do the rest.

SUPERIOR QUEEN GRATE.

The grate in the Queen stove is the rocker type and strikes the fire at four points. This is far superior to any draw center or shaker grate, because it cleans the fire thoroughly, and by striking at four points will break up and remove all clinkers.

COLLAPSIBLE HOVER.

The hover used on Queen stoves is collapsible and made of four pieces of galvanized iron. This hover comes knocked down, with holes punched and stove bolts attached, ready for putting together. By being collapsible, it enables you to save room when storing, and lessens the danger of damage when not in use.

BURNS ANY KIND OF FUEL.

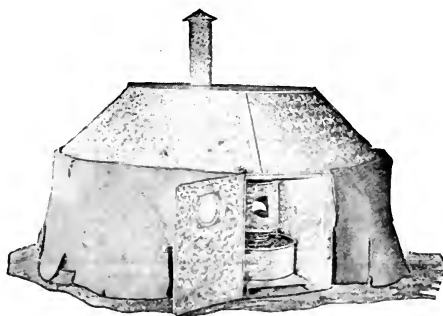
The Queen stove burns any kind of fuel with equally satisfactory results. We recommend chestnut sizes in all kinds of fuel, and hard or soft coal, coke, charcoal or briquettes burn equally well. Of course, hard coal will not cause the pipe to become dirty as quickly as the others, but it will give no better heat.

No. 1—600 chick size, \$25.50. No. 2—1200 chick size, \$31.50.

QUEEN PERFECTION HOVER.

**A Real Lamp
Hover.**

**Built Right and
Works Right.**



**A Mother for
the Motherless.**

**That Is All There
but the Cluck.**

This hover is built of only the best known grades of material. We have tested it with a real **Queen** hatch of real live chicks and we know it works to perfection. It is built all of heavy gauge galvanized iron. Has a proper distribution of heat, and for one hundred to one hundred and fifty chicks it is the ideal equipment. It has a thirty-inch hover.

Price, \$21.50.

Prices subject to change without notice. (See note on page 2.)

BLUE HEN COLONY BROODERS.

Warms Floor without Overheating. Gives proper amount of heat as well as required amount of fresh air **at the same time.** Chicks can't thrive without fresh air. They get it—and without floor draft—with a Blue Hen.

Exclusive Curtain Attachment. One of the finest features of the Blue Hen. Prevents floor draft, yet provides plenty of fresh air. Compare this with curtainless brooders which make chicks huddle around heater.

Other Brooders either overheat the brooder house in getting the floor warm enough, or they confine the heat with a curtain fastened tight to hover edge, cutting off the fresh air supply altogether.

Easy to Operate. Anybody who can run an ordinary coal stove can operate a Blue Hen Colony Brooder. In twenty minutes it can be set up complete ready to start the fire. Complete illustrated instructions for setting up and operating are furnished with each brooder.

TWO SIZES:

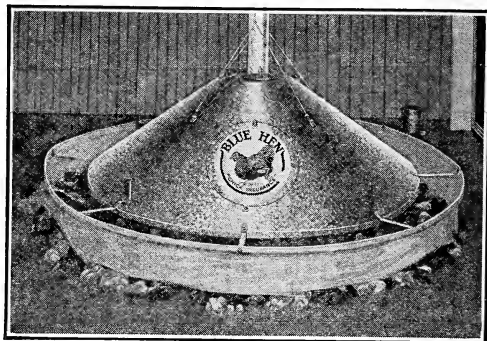
No. 44, 500 chick size, \$30.00

No. 45, 1,000 chick size, 35.00

Powerful Cast Iron Heater. Made entirely of cast iron. Base is one piece, firepot and top all one piece—no joints to leak gas or ashes. Built for long service.

Holds Heat Down around Chicks. The hover, made of heavy galvanized iron, deflects the heat and holds it down around the chicks. Large circular door in hover for convenience in tending fire. Hover easily raised for cleaning underneath.

Like a Mother Hen. The Blue Hen Brooder sends the chicks out for exercise outside the hover, calls them back when they feel the need for more heat, warms and snuggles them while they sleep.

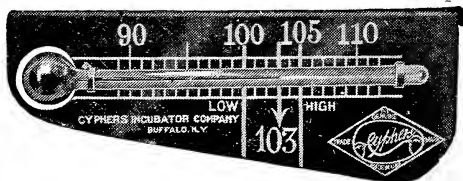


Snug and Warm under the Blue Hen.

HIGH GRADE TESTED THERMOMETERS.

The price of incubator thermometers does not include the wire hanger. Wire hangers will be supplied at ten cents extra for each thermometer. In ordering wire hangers, be sure to state size of your incubator and year manufactured. If machine has no packer's slip bearing date of manufacture, send description of machine. This is important.

When ordering brooder thermometers, name the style of brooder in which it is intended to be used.

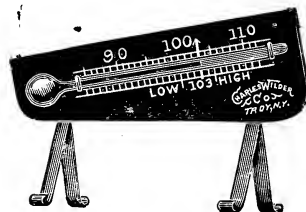


Cyphers Incubator Thermometer.
Price, 60 cents.

WILDER THERMOMETER.

Illustration shows the thermometer with legs unfolded. Easy to see, and may be quickly placed in any part of egg tray. Accurate to the smallest degree.

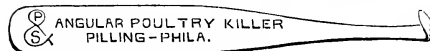
Price, 65 cents.



Cyphers
Brooder Thermometer.
Price, 90 cents.



FRENCH POULTRY KILLING KNIFE.



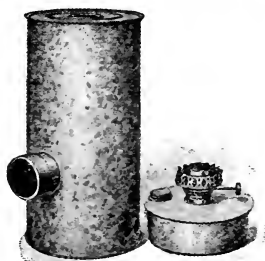
ANGULAR POULTRY KILLING KNIFE.

POULTRY KILLING KNIVES.

Every poultry raiser should have one of our killing knives. They are made of finely tempered instrument steel, with nicked handle. Sent, postpaid, on receipt of price.

Angle blade, 65c.; French, straight blade, 65c.

Prices subject to change without notice. (See note on page 2.)

Practical Egg Tester.**Practical Egg Tester.**

Is 15 inches high, 7½ inches in diameter. Is made of galvanized iron, and is equipped with an extra strong reflector. The lamp is made of the best block tin, the seams being machine turned, and soldered and tested for leaks. The burner is of the latest pattern and construction. No chimney is furnished because of the liability of breakage in shipping. An ordinary glass chimney will fit the burner and is exactly adapted to the purpose.

Price, complete (including box, lamp and reflector), \$1.50.

X-Ray Egg Tester.**X-Ray Egg Tester.**

Is made of block tin and consists of a central cylinder or lamp flue 5½ inches high, with an outside diameter of 2½ inches at the base and 2¾ inches at the top. It is designed for use on an ordinary hand lamp, and fits over any style of burner with a diameter approximating that of the tester.

Price, 35 cents.

THE "TRIUMPH" CAPONIZING SET.

There is no doubt as to the advantages of caponizing. The operation is very simple, and with a "Triumph" Caponizing Set it can be performed with safety and thoroughness.

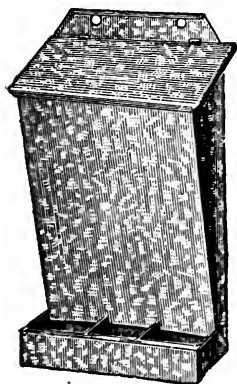
Price, per set, \$3.00.

WILDER MOISTURE GAUGE FOR INCUBATORS.

This instrument is designed to meet the demand of the practical poultryman for a simple, direct reading gauge which will enable him to keep the amount of moisture in his incubator as near as possible to a desired point.

By noting the position of the mercury column, the operator can tell at a glance whether to increase or decrease this amount.

Price, \$1.25.

**Grit and Shell Box.**

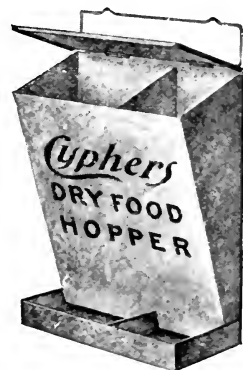
Made of best grade galvanized iron, in one size only. Has three compartments, for grit, oyster shell and charcoal. Cover lid on a slant prevents fowls roosting on the box and keeps contents clean.

Price, \$1.10.

Dry Food Hopper.

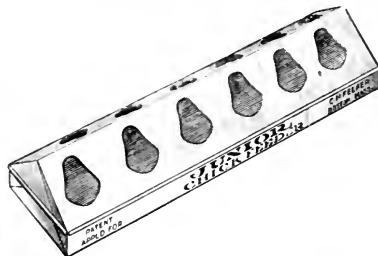
Is similar to the grit and shell box, but is larger and has three compartments, holding three quarts in each.

Price, \$1.35.

**ATSATT CHICK FEEDER.**

A neat device for feeding young chicks; they cannot get into it or stand on it. The top removes easily for cleaning or filling. 10 inches long, 4 inches wide.

Price, 40 cents.

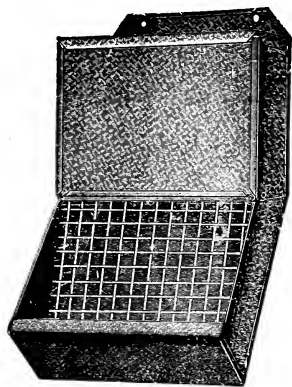
JUNIOR CHICK FEEDER.

Can be used either for dry feed or for water. Easily cleaned and so made that the chicks cannot soil the feed.

Price, 40 cts.

Prices subject to change without notice. (See note on page 2.)

SEXTON DRY FEED HOPPER.



OPEN.

This hopper is arranged to hang on the wall the desired distance from floor and never need be removed from the wall to be refilled. It is impossible to waste any feed, as the pan at the bottom takes any feed that may be picked out, and the last crumb can be used, therefore saving any waste. The body being covered keeps feed dustproof and clean, and is always dry.

Body made of galvanized iron and the grating is of round galvanized wire, preventing the poultry from cutting their bills.

The lower cover is so arranged that it is held up by locking the top cover of hopper over same, and by raising the top cover the lower cover will fall in place. Simple in construction, easily operated and absolutely "rat" and "mouse" proof.

Price, poultry size, \$2.00
" poultry extra large size, 3.25



CLOSED.

NORWICH AUTOMATIC FEEDER.

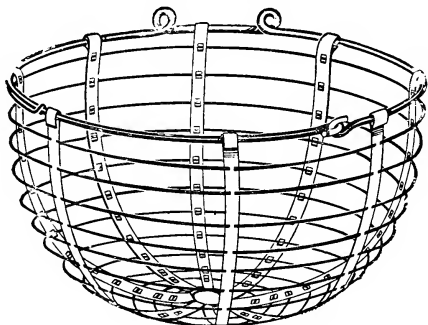
"FILL THE HOPPER AND THE BIRDS DO THE REST."

Fill the hopper with any dry grain feed, or any mixture of dry grain feed, and the revolving bait bar with cracked corn. Stand the Norwich Automatic Feeder anywhere in the yard, pen or house, and put any kind of litter under machine. Adjust valve to feed desired quantity. Adjust legs for required height. Every kernel of grain put in the hopper will go to the flock. Nothing will be lost from any cause. The exercise given by the action of the machine is just sufficient to keep the flock in perfect condition; a few days' trial will show the breeder that the flock will be bright and alert, and with a total absence of dull, stupid or drooping appearance.

Price—No. 1,	.	.	.	.	.	.	.	\$5.00
No. 2,	.	.	.	.	.	.	.	5.50
No. 3,	.	.	.	.	.	.	.	6.50



WIRE HEN'S NEST.



Strongly made of heavy wire, and very durable. Fastens to the wall with two heavy screws. Easily kept clean. No harbor for vermin.

Price, 25c.; \$2.75 per doz.

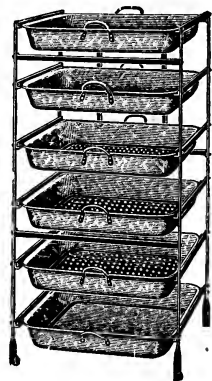
ECONOMY OATS SPROUTER.

The Natural Process for Sprouting.

Contains five sprouting pans and one drip pan 16 x 17 inches. Iron rack is 35 inches high.

By feeding sprouted oats through the winter, egg production can be kept up to a much larger degree than otherwise.

Price, \$8.50.



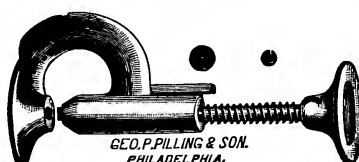
PERFECT CHICKEN PUNCH.



Chicks may be marked as soon as hatched without injury.

Price, 35 cents.

PHILADELPHIA POULTRY MARKER.



Do you keep a record of chickens? There is no better or quicker way than by marking, as many different marks can be made by punching web between the toes. Made in two sizes.

Price, 35 cents.

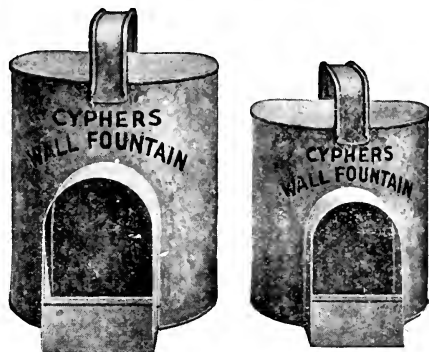
Prices subject to change without notice. (See note on page 2.)

POULTRY DRINKING FOUNTAINS.

WALL FOUNTAIN.

The construction of these fountains prevents the water from getting dirty and full of litter. A galvanized iron hood keeps foreign matter from dropping into the water, yet allows fowls to drink readily. They are very convenient to handle, and can be hung up on the wall above the floor, the back of the can being flat. They will not break by freezing.

Price—1 gallon, \$1.10 ; 2 gallons, \$1.35.



THE "SANITARY" FOUNTAIN.

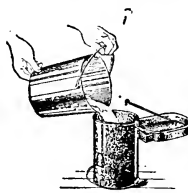


Made of heavy galvanized iron, perfect in workmanship; most convenient fountain on the market.

A one-gallon fountain will supply twenty fowls.

	Price.	
1 quart.		\$.35
1 gallon,		.85
2 gallons.		1.10

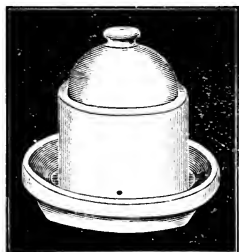
THE KEYSTONE FOUNTAIN.



Owing to the round bottom, which is hinged to the top and locks into place so that it cannot drop off, this is a fountain especially easy to keep clean. Galvanized after being made.



	Price.		
1 quart.	\$.55	1 gallon.	\$1.00
2 quarts.	.75	2 gallons.	1.35



STONE FOUNTAIN.

	Price.	
1-4 gallon.		40c.
1-2 gallon.		45c.
1 gallon.		55c.

THE PEERLESS FOUNTAIN.

Protected from dirt and filth. The fowl cannot injure their combs while drinking. Easy to clean and fill. Made of heavy galvanized iron. Durable and practical.



	Price.	
5 quart size.		\$1.10
Chick size.		.45

THE

Norwich Automatic Air-Lock Fountain.

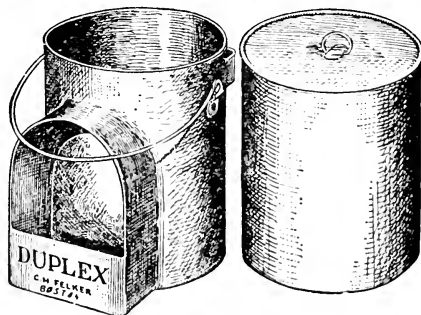


The most perfect device ever placed on the market for automatically supplying pure, fresh water in the poultry house. It is a physical and absolute impossibility to contaminate or pollute the water supply, and requires cleaning about once in three months only. Is practically frost proof. Fitted with detachable cup, removable oil chamber, heat generator, etc.

Made in one size only, 5 gallons capacity.

Price.	
Complete with burner base.	\$7.50

THE DUPLEX FOUNTAIN.



Top Section slides into bottom section.

The latest and most practical sanitary fountain on the market. This is a double font. Keeps the water clean and pure. Easy to fill; easy to care for. Made in two sizes.

	Price.	
1 gallon.		\$1.25
2 gallons.		1.50

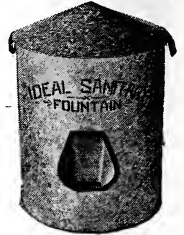
Prices subject to change without notice. (See note on page 2.)

IDEAL SANITARY POULTRY DRINKING FOUNTAIN.

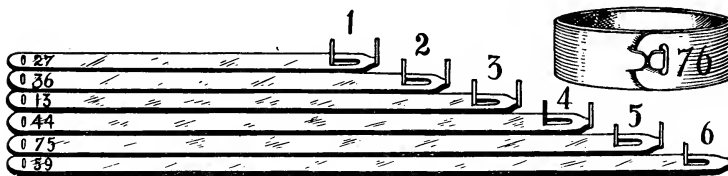
The simplest, handiest and most practical fountain made. Keeps water the right temperature all the year. Has no lamps to trim and valves to get out of order. Saves time, labor and worry, and costs nothing to run. The open pan or drinking fountain gave to poultry only stale or filthy water which was too warm in summer and too cold in winter. These conditions led us to devise a fountain in which water could be kept **pure** and **clean** and of desired temperature in any climate.

The fountain is made of galvanized iron, and is similar in construction to the fireless cooker, being packed with a non-conducting material to retain the temperature of the water.

Size.	Extreme height.	Diameter.	Weight.	Price.
2 gallon	15½ inches	13 inches	15 pounds	\$5.00



LEG BANDS FOR POULTRY AND PIGEONS.



DOUBLE CLINCH LEG BANDS

POULTRY SIZES
CUTS SHOW EXACT LENGTH

**DOUBLE CLINCH
LEG BANDS.
A BIG SELLER.**

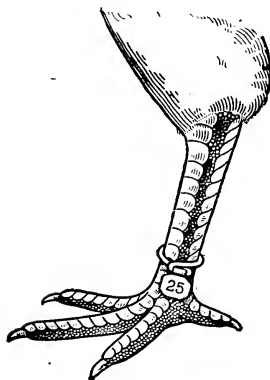
Made of aluminum, with large raised numbers.

These bands are neat, easily applied, and cannot come off by accident.

In ordering state what breed they are for, and what letters or numbers you wish put on them. Number 3 is the size most generally used for poultry.

Stock constantly on hand, packed in boxes of 100, numbering from 1 to 100.

**Price.
85 cents per hundred.**



Climax Leg Bands.

Easily Applied and Easily Removed.

One of the oldest and most durable bands on the market. Especially adapted for use on feather-legged fowls, also on turkeys, ducks and geese. Made of round spring wire, tags of aluminum, with neat, plain numbers.

Packed in boxes of 100, numbering from 1 to 100.

**Price.
90 cents per hundred.**



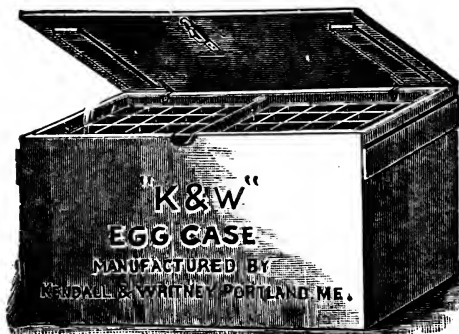
Colored Spiral Celluloid Leg Bands.

Will identify birds as far as one can distinguish colors. Indestructible and can be slipped on and off like a key ring.

Red, white, blue, amber, green, black, pink, ruby—a stock of these colors constantly on hand.

Price, 90 cents per hundred.

Prices subject to change without notice. (See note on Page 2.)



"K. & W." EGG CASE.

The most popular Egg Case in the market and used largely by shippers of eggs.

PRICES COMPLETE.

8 dozen	\$1.10
15 "	1.85
30 "	2.35
49 "	2.85

PARCEL POST

EGG BOXES.

Made with double walls of corrugated pasteboard, with corrugated pasteboard partings for the eggs.

12 egg,	\$1.60 per doz.
24 " "	2.20 " "
48 " "	3.60 " "
74 " "	4.75 " "

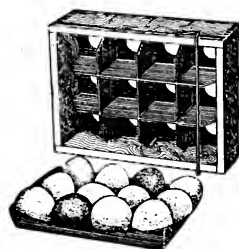
STAR EGG CARRIER AND TRAY.

The excellence and economy of Star Egg Carriers appeals to all who deliver eggs. Quickly filled and quickly emptied.

Carriers are made of strong wood, and can be piled deep in the delivery wagon.

Price.

No. 1 (1 dozen eggs),	\$5.25 per doz.
No. 1 trays,	6.50 per M.



DOUBLE QUICK GRAIN SPROUTER.

Outside cypress case insulated to retain heat. Inside galvanized steel grain chamber. Lamp heat passes up between the walls. Utilizes all the heat and saves in oil. May be used in zero temperatures. The water pan above the lamp creates the vapor that bathes the grain in warm moisture, thus producing the highly edible vapor-bath sprouts. Fitted with drain tube for overflow, well ventilated, has glass doors to "green" the sprouts, removable top, etc. Grain trays made of one piece galvanized sheet steel without rivets or solder.

No. 1, 1-4 bushel, 25 to 35 hens,	.	.	.	.	\$12.00
No. 2, 1-2 bushel, 50 to 75 hens,	.	.	.	.	16.00
No. 3, 1 bushel, 100 to 150 hens,	.	.	.	.	24.00
No. 4, 2 bushels, 200 to 300 hens,	.	.	.	.	32.00
No. 5, 4 bushels, 400 to 600 hens,	.	.	.	.	48.00
No. 6, 8 bushels, 800 to 1200 hens,	.	.	.	.	72.00

Furnished with lamp, thermometer, directions.



PREMIUM METAL SECTIONAL SPROUTER.

Constructed of galvanized sheet steel reinforced by an outside Cypress framework. The Premium incorporates all the essentials of a vapor-bath sprouter such as heater, vapor pan, glass doors, etc. The Premium is designed to be used where temperature does not run much below freezing. It is built on the sectional plan; add sections as it is desired to increase the capacity. Small base holds 1-4 bushel and each small section 1-4 bushel. Large base holds 1 bushel, and each large section 1 bushel.

Prices.

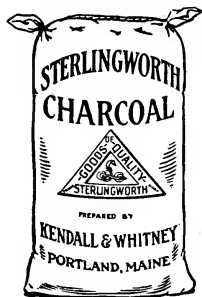
Small Base, 1-4 bu., 25 hens,	\$10.00	Large Base, 1 bu., 100 hens,	\$18.00
Each Small Section, 1-4 bu.,	3.50	Each Large Section, 1 bu.,	7.00

Furnished with lamp, thermometer, directions.

Shipments made direct from factory by freight prepaid.

Prices subject to change without notice. (See note on page 2.)





POULTRY CHARCOAL.

PREPARED EXPRESSLY FOR FEEDING CHICKS AND FOWLS.

Fine Powdered, for mash foods for poultry and stock.

Fine granulated, especially for chicks.

Medium granulated, for half-grown fowls and pigeons.

Coarse granulated, for fowls, geese and turkeys.

Price, 50 lb. paper lined burlap bags, \$2.50.

NEWFIELD POULTRY SHIPPING CRATE.

Made of green elm, then thoroughly dried. Its round corners prevent injury and loss by crowding, so frequent in square cornered crates.

Price, \$2.75.

WATER GLASS.

Saves Money and Helps Keep Down the High Cost of Living.

Put your eggs down in the spring and summer when they are cheap and keep them fresh for winter use. One gallon makes sufficient solution for fifty dozen. It has been thoroughly tested. Do not trust eggs to water glass of inferior strength. Water glass must be pure and strong to safely protect eggs.

Price, 1 qt., 40 cts.; 1 gal., 90 cts.



EGG-O-HATCH.

FOR BETTERING THE INCUBATOR HATCH.

Strengthens the Chick and Weakens the Shell.

The most serious problem confronting the poultryman is the percentage of strong, livable chicks that he will receive at hatching time and the percentage that will appear as "dead in the shell." Incubator hatching is different from hen hatching, with eggs of various age and hardness of shell, less frequent shifting or turning and excessive feeding of meat, grain, etc., to breeding stock. Poor hatches are not so often the fault of the incubator as of the eggs. A weak chick in a hard, tough shell has little chance to emerge from the shell, but if you have, at hatching time, strong chicks and weak porous shells, they will not only hatch better but will grow and thrive better after hatching. To save the shell-bound chicks, use "Egg-o-Hatch."

Price, 60 cents.



"K. & W." ROOFING.

IN 2-PLY AND 3-PLY SINGLE SQUARE ROLLS.

ELASTIC AND DURABLE.

FEELS LIKE RUBBER.

LOOKS LIKE RUBBER.

BETTER THAN RUBBER

CONTAINS NO TAR.

Large headed nails, cement and directions for laying packed in center of roll.

Write for quotations.

"STERLINGWORTH" FISH FOOD.

A pure food, prepared especially for feeding gold fish, etc.

PRICE—Natural Food, 15 cents per package. Wafer Food, 15 cents per package.

Prices subject to change without notice. (See note on page 2.)

ALFALFA MEAL.

This makes a green food the year round. It is very high in protein and furnishes to chicks a growing food, which at the same time has a medicinal value.

Price, in 100 lb. bags, \$3.00.

"K. & W." POULTRY REMEDIES.

- Remedy No. 1.** For all forms of indigestion, liver disease, sour crop, crop-bound.
Remedy No. 2. For rheumatism and cramps.
Remedy No. 3. For all sudden colds, with sneezing, watery discharge from eyes and nose. Prevents roup.
Remedy No. 4. For catarrhal colds, with rattling in throat.
Remedy No. 5. For all diarrhoeas of poultry, and particularly in cholera.
Remedy No. 6. For diptheritic roup and canker.
Remedy No. 7. For chicken-pox, bumble-foot, to promote healing of sores. Cures chronic catarrh.
Remedy No. 8. For soft-shelled eggs, all diseases of egg organs and to correct sterility.
Remedy No. 9. For egg-bound. Also for the diseases where there is swelling of the eye with an accumulation of yellow matter under the lids.
Remedy No. 10. For worms.
- These remedies are put up in tablet form, 100 tablets to a vial. Each label contains full directions for use and the diseases which the remedy will prevent or cure. Price, 40c. per vial. Please order by number.



LEE'S LICE KILLER.

A liquid preparation having all the killing properties of any powder or dip; besides, the *vapor* that it gives off is destructive to insect life, though harmless to fowl. It permeates every crack and crevice of the poultry house and all the hiding places of vermin and destroys them.

Price.

1 qt., 50c.; 1-2 gal., 75c.; 1 gal., \$1.15.

LAMBERT'S DEATH TO LICE POWDER.

FOR FOWLS, CHICKENS AND ANIMALS.

DIRECTIONS.

Work the powder well down to the skin, especially under the wings and around the neck. Dust setting hens thoroughly. Scatter about a teaspoonful of the powder in the nest material.

For Lice on Young Chicks.—Rub small quantities of the powder into the down on the head, neck and back. Then brush the powder out.

Price: 15 oz. pkg., 25c.; 3 lb. pkg., 50c.; 6 1-4 lb. pkg., \$1.00.

FIGHT MITES WITH MALOX.

The gray or red mite, which lives by sucking the blood of domestic fowls, leaves them after satisfying its hunger and hides in the cracks and crevices of the building. The way to kill them—kill them all—is by spraying the interior of the building with Malox.

The mite breeds in the filth and droppings, its eggs hatch in two days, and in less than a week the newly hatched mites are themselves laying eggs. In a short time the poultry house is literally swarming with mites; they attack the hens voraciously, and unless they are exterminated immediately the hens cease to be productive.

Malox Kills Every Mite It Touches—and It Touches Them All if Properly Used.

Price: 1 qt. cans, 50c.; 1 gal. cans, \$1.25.

Prices subject to change without notice. (See note on page 2.)

POULTRY FEEDS.

HIGHEST QUALITY AT LOWEST POSSIBLE PRICE.

EVERYTHING NECESSARY FROM START TO FINISH.

Blatchford's Milk Mash.

Pratts Buttermilk Baby Chick Food.

Pratts Buttermilk Growing Mash.

Pratts Milk Egg Mash.

Globe Chick Feed.

Globe Scratch Feed.

Bone and Meat Meal.

Oyster Shells.

Fine, Medium and Coarse Grit.

Fine, Medium and Coarse Charcoal.

Bone Meal and Poultry Bone.

Alfalfa and Meat Scraps.

EGG CASE CUSHIONS.

These cushions are made of excelsior, eleven inches square and about one-half inch thick, for use in either fifteen or thirty dozen egg cases, to prevent the eggs from being broken in shipment.

Price, \$1.75 per hundred.

"K. & W." ROUP REMEDY.

Will cure most cases of roup, if used according to directions.

PRICE.

Per package (makes 25 gallons), 25 cents.



STERLINGWORTH DIARRHOEA REMEDY.



A reliable remedy for diarrhoea, dysentery and other kindred bowel troubles in young chickens, full-grown fowls and pigeons. Keep it on hand and use it as a preventive. It is a powder for use in the drinking water. The chickens and fowls take their own medicine.

PRICE.

Per box, sufficient for several flocks, 50 cents.

Prices subject to change without notice. (See note on page 2.)

Pratts

ANIMAL AND POULTRY REGULATORS AND REMEDIES.

BUTTERMILK BABY CHICK FOOD.

SATISFACTION GUARANTEED OR MONEY REFUNDED.



An all year round help to profitable poultry raising. Keeps hens laying regularly summer and winter.

Pratts Poultry Regulator

helps the hens overcome the weakening effect of the molt, to put on new feathers quickly and get back to work.

And don't forget that pullets will develop more rapidly and begin laying at a much earlier date if Pratt's Poultry Regulator is used.

Packages, 30c., 60c. and \$1.20; 12 lb. pails, \$1.80; 25 lb. pails, \$3.10.



Always on Guard.

Roup is the alert foe of poultry. Its ravages can be prevented and complete protection given your flocks by using

Pratts Roup Remedy.

Tablets or Powder.



Its healing properties are quickly taken into the system, purifying the blood and killing the roup germs. It not only cures, but tones up and restores the birds to vigorous health. It is the one remedy for genuine Roup as well as colds and similar diseases.

30c., 60c and \$1.20

Remember that little chicks are really babies and cannot digest heavy food. The first three weeks they must have a carefully prepared ration—perfectly balanced and just suited to the delicate digestive organs.

Pratts Baby Chick Food



is scientifically prepared. It contains all the food elements the baby chick needs to make him grow quickly and strong—bone, muscle and feather builders in just exactly the right proportion. It imparts the nourishment that promotes

health and prevents disease.

One cent's worth of Pratt's Baby Chick Food is enough to last three weeks, and it means saving chicks.

Packages, 35c. and 70c.
14 lbs., \$1.50; 25 lb. bag, \$2.50; 50 lbs., \$4.75.

Get rid of lice on your poultry, in nests, dust baths, incubators and elsewhere in a day's time by using

Pratts Powdered Lice Killer.

30c. and 60c.

Effective, non-poisonous, non-irritating. It quickly and thoroughly kills all lice on little chicks, big chicks, setting hens and incubator chicks. It rids horses, cattle, hogs, dogs and cats of lice, and destroys ticks on sheep. It destroys insects and bugs on vines, plants and flowers. Drives out moths from closets, furniture, carpets and clothing.



Clean and disinfect your poultry houses, incubators and brooders for comfort, health and safety. The sure way is to use

Pratts Poultry Disinfectant.



Spray it on walls and ceilings, into cracks and crevices, and paint it on roosts and nest boxes. It kills all disease germs.

1 qt., 70c.

2 qts., \$1.25.

1 gal., \$2.00.

More work out of your horses, more milk from your cows, fatter hogs—these are a few of the benefits which come from using

Pratts Animal Regulator.

This is the original and pioneer stock regulator of America. Tested thoroughly for nearly half a century, its worth is known and recognized by stock owners the world over. Always sold on a guarantee that it will satisfy you or your money back.



30c., 60c. and \$1.20.
12 lb. pails, \$2.55; 25 lb. pails, \$4.10.

Pratts White Diarrhoea Tablets.

30c. and 60c.

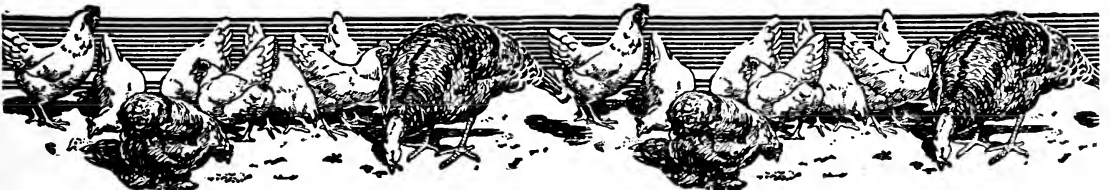
Pratts Head Lice Ointment.

35 cents.

Pratts Conditioner for Horses and Cattle.

Not a Feed—a Conditioner.

12 lb. pails, \$1.50; 25 lb. pails, \$2.75.



Prices subject to change without notice. (See note on page 2.)

INTERNATIONAL STOCK FOOD TONIC.

3 Feeds for One Cent.



BIGGER LIVE- STOCK PROFITS

can be made from every animal on your farm. You can rapidly increase the weight of your hogs, beef cattle and sheep—you can greatly increase the milk flow of your cows—you can get more work from your horses—through the use of this food tonic.

FOR COWS.

International Stock Food Tonic helps cows to give a greater milk yield as it causes the nutritious elements of their grain feed to be assimilated and thereby provides more milk and butter fat. Many of our customers state that its use has made a big increase in the milk flow of their cows. Some state that it has doubled and even more than doubled it.

FOR HORSES.

International Stock Food Tonic enables horses to perfectly digest and assimilate a far greater proportion of their food than they would without it. This, in a great measure, prevents the great waste of grain passing through the system unassimilated. With improved assimilation the grain is converted into flesh, bone and muscle. This means greater strength and endurance and a big saving in grain feed.

FOR HOGS.

International Stock Food Tonic will help to cause all feeds given to hogs to be assimilated into the system where they go right into extra weight. The amount of high priced grain feed given to hogs matters little unless they digest and assimilate it. When you raise hogs you might as well raise BIG ones and International Stock Food Tonic will help you do it.

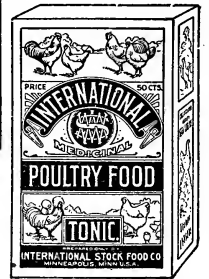
In packages, 30c., 60c., \$1.20; in pails, \$4.00.



**MAKE MUCH MORE
MONEY with your Poultry**
by using **INTERNATIONAL
POULTRY FOOD TONIC.**

In packages, 30c., 60c., \$1.20.

**HELPS TO MAKE
HENS LAY MORE EGGS
AND HELPS TO KEEP
POULTRY HEALTHY.**



CARBONOL IN THE HEN HOUSE.

Carbonol should be used as a general disinfectant in hen houses to keep them clean and healthful, kill lice and destroy any disease germs before they have a chance to infect the flock.

LICE AND ALL KINDS OF VERMIN

may be destroyed on poultry, pigeons, etc., by painting roofs and spraying floors and walls of their coops and houses with a 1-65 solution of **Carbonol** (about one tablespoonful to a quart of water).

PRICE.

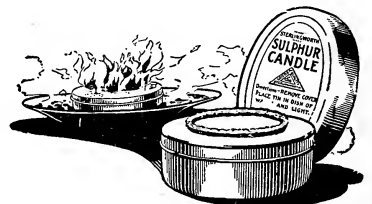
4 ounce bottle, 25c.; pint bottle, 50c.; quart bottle, 75c.; 1 gallon can, \$1.85.

Sterlingworth Sulphur Fumigating Candle.

The candle is made from pure, high grade sulphur, and has a circular wick, which, when once lighted, stays lighted. Is especially useful to poultrymen in ridding poultry houses of insect pests, as the vapor from it penetrates crevices not reached by other means.

In circular tin box, price 15 cents.

Prices subject to change without notice. (See note on page 2.)



Mann's Bone Cutters.

THE STANDARD OF EXCELLENCE.

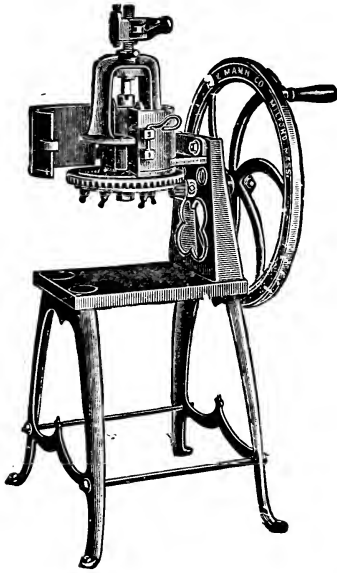
A STANDARD WHICH HAS ONLY BEEN OBTAINED
BY YEARS OF EXPERIENCE.

PRICE LIST.

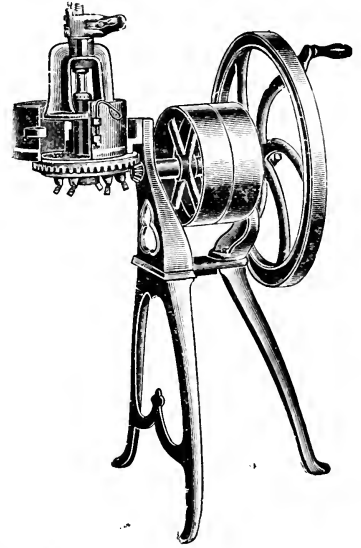
NO DISCOUNT FROM THESE PRICES.

No. 5C	(with Crank Handle),	\$12.00
No. 5B	(with Balance Wheel),	16 00
No. 5 BM	(with Bal. Wheel and Iron Stand),	20.00
No. 7	(with Balance Wheel),	24.00
No. 7 1-2	(Semi-power Machine),	32.00
No. 9	(Stand. Bone Cutter),	36.00
No. 11	(Comb'n Power Cutter),	50.00
No. 12	(Small Power Cutter),	65.00
No. 15	(Large Power Cutter),	125.00
No. 18	(Large Power Cutter),	200.00

Send for Illustrated Catalogue.



No. 9.



No. 7 1-2.

BANNER ROOT CUTTER.



BANNER CUTTER NO. 7.

Prominent poultrymen all over the country have taken up the matter of green food for their fowls. It is, in fact, a hen's natural food. It is a great egg producer in itself, because it keeps the body of the hen in a good, healthy condition, and healthy hens are the only egg producers, no matter what the breed. Not only do roots make healthy

hens, but their economy as food is astonishing.

It cuts fast and is easy running. Leaves the feed in fine ribbon-like strips that make choking impossible. Fowls large or small can safely eat the feed. The knives are adjustable and made of the very best of steel. An iron grate in bottom of hopper lets dirt and gravel escape before reaching the knives. In this cutter we offer the poultrymen a low priced, high grade, nicely finished and mechanically constructed machine, and feel that anyone who desires to feed roots and vegetables to their flocks can well afford to own one. Two to five minutes will cut enough feed for a large flock of fowls.

Price on application.

CHICKEN FEED CUTTER, INVALUABLE TO POULTRY RAISERS.



This is a highly efficient machine for cutting clover, hay or other feed into extremely short lengths. It is made with three knives $6\frac{1}{2}$ inches long, and a self-feeding comb roller, which straightens the feed as it is presented to the knives, making a more uniform length of cut. It cuts very rapidly, being one of the fastest machines of its size.

Cuts 1-4, 7-16 and 3-4 inches.

Price on application.

Prices subject to change without notice. (See note on page 2.)

BLATCHFORD'S CALF MEAL

The Complete Milk-Equal



"Good to the last drop"

Sold in 100, 50 and 25 pound bags

Just the thing to raise your calves right from birth.

Then sell your milk and get the benefit of the high creamery prices.

No more scouring calves.

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion. Will push calves forward better and quicker than any other food.

100 pounds makes 100 gallons of Complete Milk-Substitute

From Sow to Pasture

Wean your little pigs easily, safely and cheaply on

Blatchford's Pig Meal



Sold in 100, 50 and 25 lb. bags

From Pig-hood to Pork-age it gives big bone and solid flesh. Prevents loss of growth and vitality during the critical weaning period, and always

makes the runts catch up.

Blatchford's "Fill the Basket" Egg Mash

fed to your pullets when three months old, will make early layers and keep them in perfect health. Does not force or fatten. Feed it to all your hens.



Make your egg profits sure



Sold in 100 and 25 lb. bags

BLATCHFORD'S MILK MASH

Saves Your Baby Chicks and Ducklings

Contains just the right combination of milk, milk-substitutes, meat and grains necessary for the best results.



2 1/4 pounds at 8 weeks!

Prevents bowel trouble, leg weakness and white diarrhea. It should be every chick's first feed! It carries them safely through the dangerous first three months. Raises 95% of every hatch!

Five pounds per chick will do it.

Grows—Matures—Fattens

Sold in 100 and 25 pound bags and in 4 pound trial cartons



NOTE: Larger and quicker profits to the farmers, stock-raisers and poultrymen are the real reasons for the success of the Blatchford Milk-Substitutes. Satisfied customers have been the cause of the steady annual increase in the Blatchford business for over thirty-five years in the United States.

We sell and recommend all of the Blatchford products, including special milk-substitutes for colts and for lambs. Write for prices.

ICE TOOLS.

Everything in ice harvesting tools and supplies for ice men, dairymen and farmers. Complete illustrated catalog sent upon request. **Write us for pamphlet "How to Harvest Ice."**



Bar Chisel.

Breaking Bar.



Splitting Fork.

Ice Shaver.



Splitting Chisel.

Ice Saw.



Ice Hook.

Line Marker.



**Ring Handle
Splitting Chisel.**



Tongs.

PRAY'S PATENT ICE PLOW.

This plow is especially designed to meet the demand for a cheap and efficient ice cutter for farmers and dairymen. It will cut from 20 to 40 tons an hour, cutting the ice blocks of uniform size, which saves much labor when packing.

The extra weight of the rider holds the plow to its work and allows the horse to be hitched much closer to the plow—an advantage where the pond is small and all the ice needed from the edge of the pond.

It is the only plow that can be successfully used by one person. The draft back of runners omits the necessity of leader or rider.

It is the only plow that has an adjustable tooth.

It is the only plow that works with runners.

It turns easier at the end of the row than any other plow.

It cuts ice with more economy on a small pond than any other plow.

A horse and one man can cut as much ice as ten men with saws.

Upon a shallow pond where a saw cannot be used this plow is indispensable.

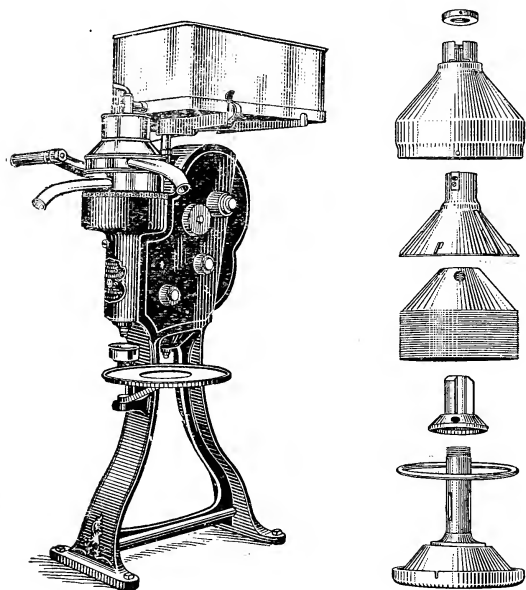
WARRANTED TO WORK AS REPRESENTED.

**Price, Four-Tooth Plow, \$20.00; Six-Tooth Plow, \$27.50;
Eight-Tooth Plow, \$30.50.**

Prices subject to change without notice. (See note on page 2.)



THE UNITED STATES CREAM SEPARATOR, WITH SELF-BALANCING DISC BOWL.



The attention of our dairymen friends is called to the **new U. S. disc bowl**—an important addition to the U. S. Cream Separator line—of exceptional interest to the many thousands who prefer a disc type skimming device.

A glance at the picture on this page will assure our many friends and customers that in the new U. S. Separator is continued the same famous U. S. construction, time tested for a score and more years—never radically changed—best without question; **to which superior construction a new disc bowl of surprising efficiency is added.**

THE UNITED STATES SEPARATOR IS FORTIFIED AGAINST EXTREMES OF TEMPERATURE.

WHEN IT IS WINTER.

When you are using a U. S. Cream Separator you don't have to heat a kettle of water to start the skimming. It works cold.

When the oil in other separators has clogged or frozen up, the U. S. Separator, with no kinks, bends, or goose necks in its oil tube, is running smoothly and silently, perfectly lubricated.

When every liquid is freezing solid, you don't have to worry about the bowl of the U. S. Separator being damaged by neglect. It empties itself automatically—always!

When the gas engine "dies," if you are using power, the U. S. has a hand crank on the other side, and you can "go to it!"

WHEN IT IS SUMMER.

When the cream is skimmed by a U. S. Separator, it keeps longer, for it is the first and only separator remarkably fortified in sanitary ways from top to bottom. Bacteria are "up against it" like flies in January.

When other separators get "vile" the U. S. is sweet and clean, with no milk drip on the frame, or in the gear case, or in the iron bowl chamber. The removable sanitary liner prevents.

When ordinary separators are turning the new batch sour, with bowl left full from the previous run, the U. S. is starting fresh and dry, the bowl having drained itself without attention.

When washing-up time comes, there are fewer parts to clean. With the mechanical washer U. S. users are through in one-third the time. Time in summer is especially valuable.

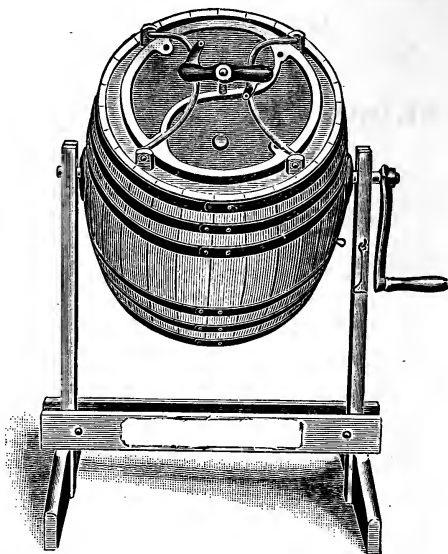
Prices subject to change without notice. (See note on page 2.)

THE BELLE CHURN.

ONE OF THE BEST BARREL CHURNS MADE.

This churn is made in the most thorough manner and of kiln-dried white oak. It will last for years. The principle is concussion and not friction—has no floats or paddles inside. It is easily operated and easily cleaned. Perfect in construction, and having no parts liable to break or get out of order, it fully meets the requirements of large or small dairies.

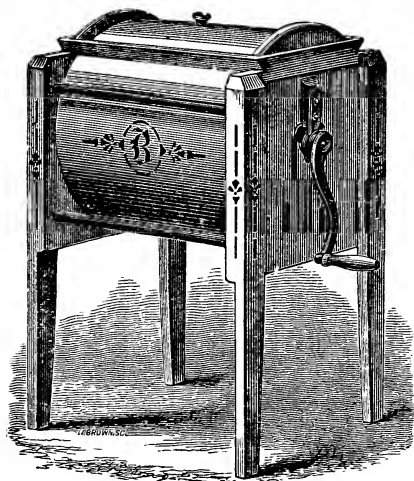
No.					Price
0	6 gallon, churns from 1 to 3 gals. cream.				\$7.25
1	10 " " " " 1 to 5 " "				8.25
2	15 " " " " 1 to 7 " "				9.00
3	20 " " " " 2 to 9 " "				10.00
4	25 " " " " 2 to 12 " "				12.75
5	35 " " " " 3 to 16 " "				14.50
6	60 " " " " 6 to 22 " " ..				20.00



THE STODDARD CHURN.

Similar in construction to the Belle.

No.		Price.	No.		Price
1	10 gal., churns from 1 to 4 gals. cream..	\$14.85	5	35 gal., churns from 5 to 16 gals. cream..	\$23.00
2	15 " " " " 2 to 7 " " ..	15.75	5½	45 " " " " 5 to 20 " " ..	28.00
3	20 " " " " 3 to 9 " " ..	17.75	6	60 " " " " 6 to 28 " " ..	33.00
4	25 " " " " 4 to 12 " " ..	19.80			



THE BLANCHARD CHURN.

The following are the leading merits of the BLANCHARD CHURN:

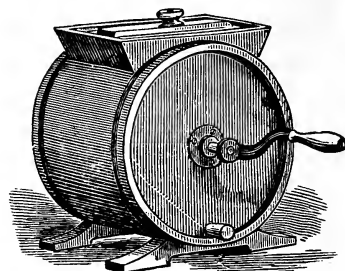
Perfect quality of all materials used. Excellency of manufacture. Simplicity of construction, having no cog wheels or gearing. Durability. Ease of operation. The action of the dasher is such as to cause agitation of the cream by creating currents, and not by beating or by friction of the cream, which may injure the grain of the butter. Facility in removing the dasher and getting at the butter. Ease of cleaning, the form of construction making the inside without any inaccessible or invisible angles or corners.

		Price.
No. 3, for up to about 2 gallons of cream.....		\$10.00
No. 4, " " " 4 " "		12.00
No. 5, " " " 6 " "		14.00
No. 6, " " " 12 " "		17.00
No. 7, " " " 16 " "		20.50

CYLINDER CHURN.

A favorite style of churn which has been in use for many years.

No.	capacity		Price.
No. 1,	2½ gallons	.....	\$4.25
No. 2,	4 "	.....	5.00
No. 3,	7 "	.....	6.00
No. 4,	10½ "	.....	7.00

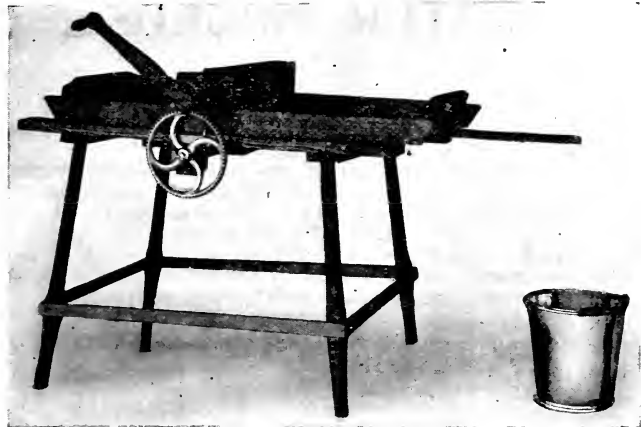


Prices subject to change without notice. (See note on page 2.)

THE WATERS BUTTER WORKER.

Practical, efficient, durable. It combines more advantages than any other. The tray is removable and thus takes the place of the butter bowl.

Will work butter in any condition satisfactorily. Made in sizes to suit any dairy or factory.



Size No.	Length of Tray.	Width of Tray.	Capacity.	Price.
0.	27 in.	14 in.	1 to 15 lbs.	\$20.50
1.	36 in.	15 in.	5 to 30 lbs.	21.50
2.	36 in.	18 in.	5 to 40 lbs.	22.75

Size No.	Length of Tray.	Width of Tray.	Capacity.	Price
3.	39 in.	20 in.	5 to 50 lbs.	\$23.50
4.	48 in.	22 in.	10 to 75 lbs.	24.00

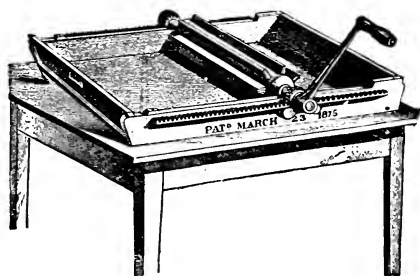
Reid's Patent Butter Worker.

These machines are all built of the best material.

The iron part is galvanized, preventing rust.

No.	Size.	Depth Inside.	Capacity.	Price.
1.	23 x 36 in.	2½ in.	50 lbs.	\$25.00
2.	20 x 36 in.	2½ in.	30 lbs.	20.00
3.	17 x 27 in.	2½ in.	20 lbs.	17.50
4.	14 x 23 in.	2½ in.	10 lbs.	15.00

Three pounds can be worked in any of the above machines, as well as a larger quantity. In buying a worker you should choose a size that will work the largest quantity that you will be likely to want to work at a time.

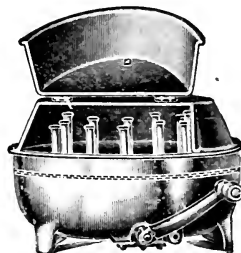


The "Facile" Improved Babcock Milk Tester.

The "Facile" Tester has taken the lead over all other Babcock machines, not only among creameries and cheese factories, but in State Experiment Stations and Dairy Schools. Several attempts have been made

to copy the machine, but so far nothing has been produced embodying all of its desirable features, and it remains to-day the leading Babcock machine.

Prices include full set of glassware, comprising test bottles, pipette and acid measure; also test bottle brush and bottle of acid.



2 bottles, \$ 7.50	8 bottles, \$19.00
4 " 8.50	10 " 20.00
6 " 18.00	12 " 22.00

ACID—FOR BABCOCK TEST.

PURE, CLEAR, FREE FROM SPECKS.

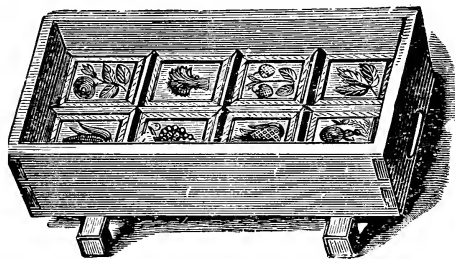
We guarantee this acid to be of proper strength for making tests.

By the pound or in carboys.

Price on application.

Prices subject to change without notice. (See note on page 2.)

COMBINATION BUTTER MOULDS.



These moulds are expressly designed to meet the demand for strictly first-class, hand-carved designs.

The cut here shown represents No. 6, which holds two pounds, and is divided into eight ¼-pound cakes.

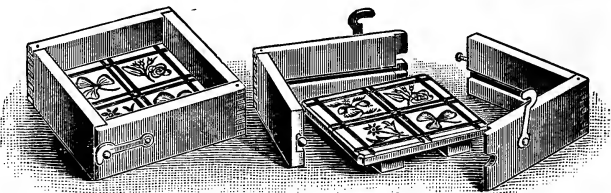
Prints engraved to order, with ordinary designs, initials or monogram, without extra charge, excepting that, should more than six letters be wanted on each cake, a charge of five cents per letter will be made for each letter in excess. Prices quoted on application for special or complicated designs or lettering.

No. of Prints.	No. of Cakes.	Capacity in Pounds.	Capacity of Each Cake in Ounces.	Dimensions of Moulds in Inches.	Dimensions of Each Cake.	Price.
2	4	2	8	11 x 3¾	3¾ x 2¾	\$5.75
3	4	2	8	12 x 3	3 x 3	5.75
4	4	1	4	4½ x 5	2¼ x 2½	5.50
5	4	1	4	10 x 2½	2½ x 2½	5.75
6	8	2	4	10 x 4½	2¼ x 2½	7.50
7	6	1½	4	10 x 3½	3½ x 1¾	7.25
8	12	1¼	2	12 x 4	2 x 2	7.50
9	16	1	1	10 x 3	1½ x 1½	7.50
10	24	1½	1	10 x 4	1¼ x 1½	8.00
12	8	1	8	11 x 5	2¾ x 2½	7.50
20A	4	2	8	11 x 4½	3½ x 2½	5.75

BLANCHARD BUTTER MOULDS.

1-2 lb., two 1-4 lb. prints, 80c.; 1 lb., four 1-4 lb. prints, 90c.; 2 lbs., eight 1-4 pound prints, \$1.35.

If engraved with initials, or any hand carving, add to the REGULAR PRICE, 25 cents for each cake so engraved.



TUB COVER FASTENERS.

Made from tin; easily applied, easily withdrawn. Tin is turned back over head of nails; impossible for nails to drop out.

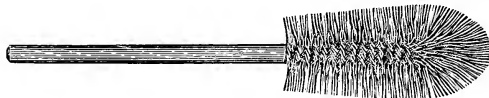
1,000 in a package. Price, \$1.75 per thousand.

BRUSHES.

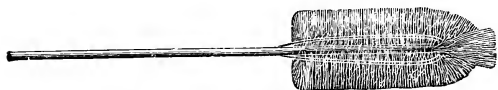
We are in a position to furnish the best kind of brushes for dairy use, and recommend especially our line of can, separator and bottle brushes.

Bottle Brushes.....	45c., 75c., 85c.	Separator Bowl.....	50c.
Test Bottle.....	10c.	Separator Tube.....	20c.
Milk Can.....	85c.	Separator Cover Spouts.....	20c.
Separator.....	25c.		

SPECIAL PRICES FOR LARGE QUANTITIES.



No. 86, 75c., and No. 120 (larger size, same style), 85c., Black Bottle Brushes.



No. 60. Black Bottle Brush, 45c.



Cover Spout Brush, 20c.

Prices subject to change without notice. (See note on page 2.)



Milk or Cream Bottles.

Refuse to receive milk in any other than **glass bottles**, as it is the only way by which you can get milk that is **sweet** and **pure** and that has not come in contact with the numberless street odors, flies, and many other undesirable influences.

The "COMMON SENSE" bottle, capped by a strong, clean paper cap, is the BEST, as it can be washed absolutely CLEAN, and no taint is possible in milk put up in these bottles.

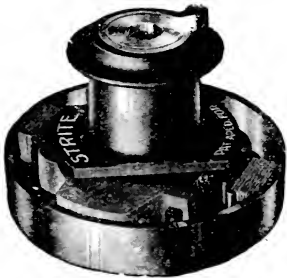
	Per Dozen.
1-2 Pint, Common Sense,	\$.90
1 Pint, Common Sense,	1.00
1 Quart, Common Sense,	1.15
1-2 Pint, Lightning (tin top),	1.00
1 Pint, Lightning	1.10
1 Quart, Lightning,	1.25

Price for gross or more quoted on application.

GLASS WARE FOR BABCOCK TEST.

	Each.
Lactometer (Fig. 6), for testing quality of milk,	\$.75
Floating Dairy Thermometer (Fig. 5),	.85
Flange Dairy Thermometer (Fig. 2),	.50
Babcock Test Bottles (for milk), 10 to 25% (Fig. 3),	.35
Babcock Test Bottles (for cream), 30 to 50% (Fig. 4),	.40
Pipettes (Fig. 7),	.30
Acid Measures (Fig. 1),	.25

The Strite Governor Pulley for Separators.



The governor pulley is not placed directly upon the cream separator, but must be placed either upon the engine shaft or upon a line shaft or counter shaft, either of which must run 200 revolutions per minute or more. The shaft can vary in speed anywhere from 200 to 1,000 revolutions without affecting the speed of the cream separator. To drive any make, or size, of hand power cream separator successfully, place an ordinary 12-inch pulley upon the shaft where the hand crank is attached. With this governor pulley you could start your power in motion full speed and the cream separator would require from 2½ to 3 minutes in coming up to its full speed. The governor pulley is bored to fit different size shafts, smallest size 15-16 inch, largest size 2½ inches.

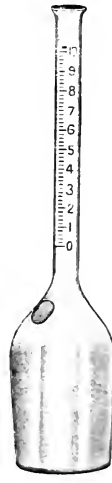
Price, No. 1, \$6.50.



1



2



3



4



5



6



7

Prices subject to change without notice. (See note on page 2.)

145 FARM USES

FOR

Safe-Clean
Powerful
Saves Time



Not a Poison
Leaves No Odor
Saves Labor

DISINFECTANT DEODORANT ANTISEPTIC

Note These Remarkable Qualities of B-K



Powerful. By Government Method test B-K has over ten times greater germ-killing strength than carbolic acid. Much stronger than coal tar disinfectants—much safer.

Safe. B-K contains no poison, acid nor oil.

Clean. B-K is colorless, leaves no stain on floors or walls.

Deodorant. B-K destroys foul odors—leaves no odor of itself. Does not soil animal's hair.

Cheap to Use. B-K is so much stronger than other disinfectants that more water is used. It goes farther.

Put Up for Dairy and Farm Use in
1 Quart for \$1.25 1 Gallon for \$3.00
5 Gallon Carboy for \$12.50

USE B-K FOR

Prevention of—	Sterilizing
Contagious Abortion	Milk Cans, Bottles
Retained After-birth	Separators
Barrenness	Milking-machines
Calf Scours—Bloat	Deodorizing
Hog, and Poultry	Cleaning Cows
Barn Disinfecting	Home Sanitation

EVERY USE OF B-K SAVES WORK
Sold Under the Manufacturers Guaranty

MANUFACTURED ONLY BY

General Laboratories

Madison, Wisconsin



Ask for Farm Bulletin No. 317

B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K • B-K

Prices subject to change without notice. (See note on page 2.)



MILK BOTTLE CAPS.

No. 1, plain or printed caps, 72c. per 1,000.

In cases of 5,000, \$3.50 per case.

No. 2 and No. 3 size, plain or printed caps, 70c. per 1,000.

In cases of 5,000, \$3.35 per case.

Special price on barrels containing 50,000 caps.

Caps with lip, 2c. per 1,000 extra.

Caps with special printing made to order.

WYANDOTTE DAIRYMEN'S CLEANSER AND CLEANER.

A powder especially compounded for use in the dairy and creamery for washing all dairy utensils, glass and tin ware, in a most satisfactory and sanitary manner. The use of this powder means absolute cleanliness.

Price, 5 lb. bags, 50c.; 80 lb. kegs, \$5.77; 280 lb. barrels, \$17.39.

WELLS & RICHARDSON CO.'S

Dandelion Brand Butter Color.

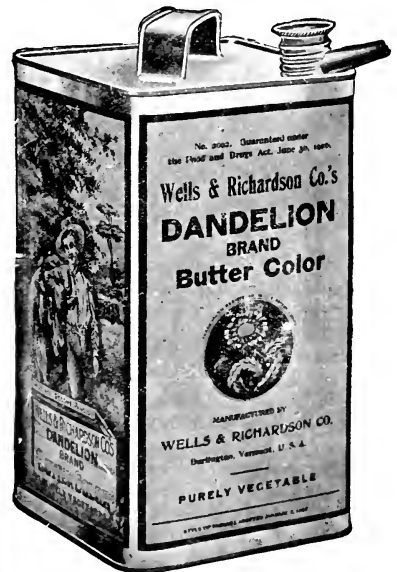
PURELY VEGETABLE.

Will not become rancid. Will not color the buttermilk.

Gives a bright June color. Always gives satisfaction.

PRICE.

Small size,	to color about	375 pounds.....	\$.35
Medium size,	"	750 pounds.....	.65
Large size,	"	1875 pounds.....	1.00
Cans,	1 gallon.....		4.50



HANSEN'S DANISH RENNET TABLETS.

FOR CHEESE MAKING.

Always of the same strength, entirely preservable, separates the cheese matter completely, and gives the greatest quantity possible.

PRICE.

Package of 25 tablets, 75c.; can of 200 tablets, \$5.50.

HANSEN'S DANISH BUTTER COLOR.



The Most Uniform, the Purest and the Most Natural Shade.

Made with the finest imported vegetable oil.

To butter makers desiring a pure, vegetable butter color, we do not hesitate to recommend Hansen's Danish as unquestionably the best in every respect.

Its high quality has never been approached by any competing preparations, and many shippers of the finest butter demand its exclusive use by their butter makers.

PRICE LIST.

Small size,	to color about	400 pounds.....	\$.35
Medium size,	"	1000 pounds.....	.55
Large size,	"	2000 pounds.....	1.00
Cans,	1 gallon.....		4.50

THE HORNE VERTICAL CAN STRAINER.

Is warranted to filter milk free from the slightest trace of sediment as fast as poured.

The milk begins to filter quickly and evenly in all directions the instant it is poured, and because of the vertical construction and large filtering area of the strainer there is no back pressure; consequently all foreign matter is caught on the vertical sides, and not forced into the milk.

Made of heavy charcoal tin, all inside joints thoroughly soldered and no angles for accumulation of filth.



Price of strainer.....	\$2.75
Price of filtering flannels, each.....	.25

Prices subject to change without notice. (See note on page 2.)

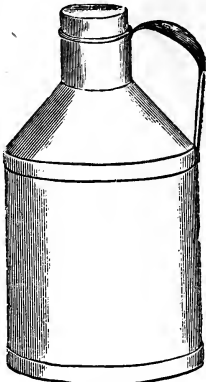
MILK CANS.

We can furnish Tin, Wood Stopper Milk Cans in any style, size or quantity.

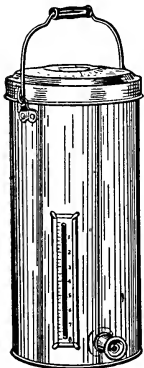
20 QUART AND 40 QUART SHIPPING CANS.

The parts of all our shipping cans are made of steel and heavily tinned by the hand dipping process, after they are formed.

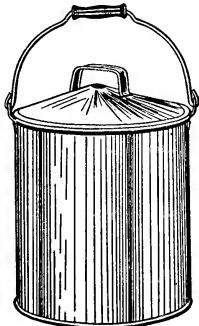
Prices furnished on application.



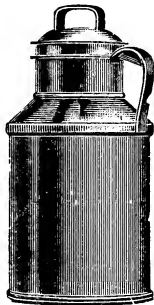
Milk Can.



"K. & W." Can.



Cream Pail.



20 Qt. Shipping Can.



40 Qt. Shipping Can.

"K. & W." Creamery Can, \$2.50



"Wonpeace" Can.

CREAM PAILS.

6 gallon, \$3.50
10 gallon, 5.00

"Wonpeace" Milk Can.

NOT A SINGLE SEAM ANYWHERE.

An idea that will delight milk-can users. Strictly seamless in every sense of the word. The whole bottom, body, breast, neck and bowl, all out of a single sheet of steel. Easily kept absolutely clean.

20 quart size, 40 quart size.

Price on application.

Prices subject to change without notice. (See note on page 2.)

CHAMPION MILK COOLER AND AERATOR.

A perfect aerator, removing all flavors arising from excessive cabbage, turnip or silo rations.

A complete deodorizer, removing the animal heat or cowy taste and all odors arising from the absorption by the milk of stable or other unpleasant gases.

A thorough cooler, reducing the temperature of the milk in one minute nearly to the temperature of the cooling medium.

It is equally well adapted to the use of any cooling medium, either running water, ice water, or, if a very low temperature is not required, ordinary well or spring water.

No.	Capacity of Milk Receiver.	Size of Dairy.	Takes Care of.	Price.
2.	18 quarts	10 to 25 cows	3 milkers	\$10.00
3.	34 "	25 to 50 "	5 "	12.00
4.	52 "	50 to 100 "	8 "	15.00



THE EUREKA SANITARY PAIL,

With Removable Strainer.

Strains rapidly and thoroughly.

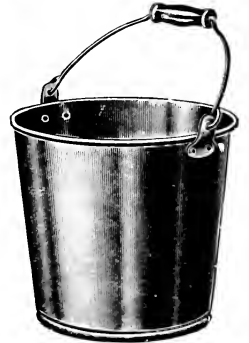
Sediment does not collect on the strainer, but passes beyond and is removed when the strainer is taken out.

Price, 14 qt., \$3.75.



PLAIN MILK PAILS.

1X 10 qt.	\$.65	2X 10 qt.	\$.80
1X 12 "	.70	2X 12 "	.85
1X 14 "	.80	2X 14 "	.90



THE NEW DOVER SANITARY MILK PAIL.

THE BEST MILKING PAIL ON THE MARKET.

Note the guard, which absolutely prevents dirt from falling from the rounded breast into the pail.

The body is in one piece, only has one seam, and the pail is made of extra heavy high grade charcoal tin plates. Every seam and crevice is smoothly soldered inside and outside, preventing dirt collection and making cleaning easy.

Many dairymen do not like to pour from a pail on the side which they milk in, on account of more or less dirt and dust which is apt to be on that side of the pail. Always pour from the Dover pail in the following manner: Have the pail opening face you; grip bottom of pail under said opening and pour over the top of the breast; the guard on the breast acts as lip.

Price, \$3.35.

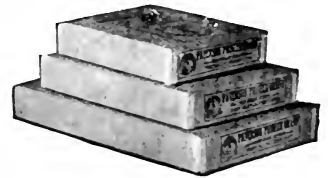
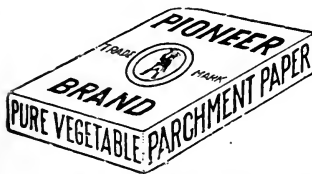


Pioneer Brand Parchment Butter Paper.

Guaranteed to contain no oil, grease, paraffine or wax.

Are you getting the best price for your butter? Try wrapping it in Pioneer Butter Paper, which completely protects it from all injurious odors, preserves the delicious flavor, and prevents the prints from becoming damaged in handling.

WE RECOMMEND—before you wrap butter, wet parchment thoroughly in clean, pure water, add salt if you prefer. It means better wrapping; it means better protection.



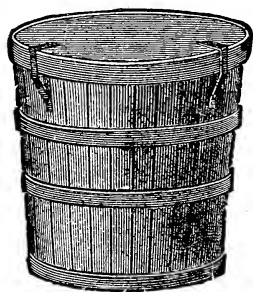
PRINTED PAPER in packages to comply with the law requiring the weight of the butter to be marked on the container. **SOLD IN PACKAGES OF 1,000 SHEETS ONLY.**

Price, package, 7 x 9 (1-2 pound size), \$2.40; 9 x 12 (1 pound size), \$3.50.

Price, plain paper, 40c. per pound.

Write for quotations for large quantities and for printing special designs.

Prices subject to change without notice. (See note on page 2.)



Butter Tubs.

We are in a position to furnish superior spruce butter tubs in any quantity desired. Tubs are kept in stock in 10, 20, 30 and 50 pound sizes, and shipments can be promptly made. Special prices for large quantities.

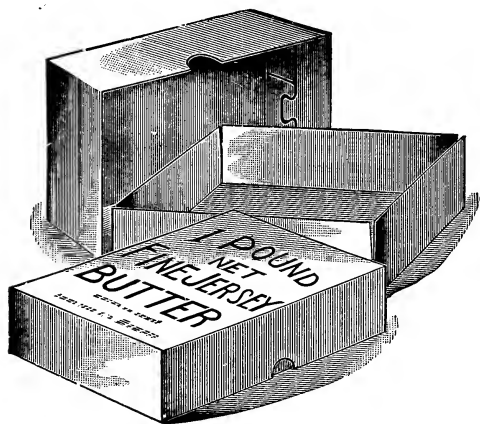
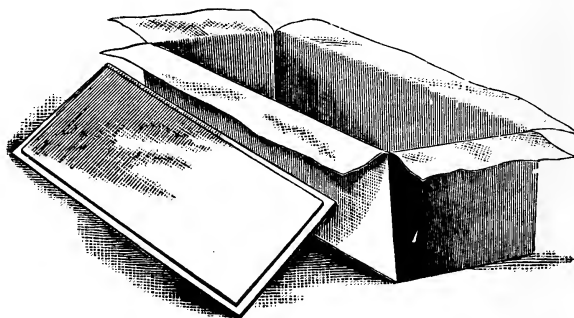
Write for quotations.

Improved Oblong Butter Box.

With Parchment Lining.

The box holds five pounds of packed butter, is nearly brick shaped, flaring so the butter will turn out, and is in the best possible shape to cut up for the table in square-like prints, and free from waste.

Price. \$1.35 per crate of 12 boxes.



ONE POUND

Folding Paraffined Paper Butter Boxes.

ODORLESS AND TASTELESS.

Price, \$1.50 per 100.

" \$13.50 per 1,000.

LAMBERT PARCEL POST BUTTER BOXES.

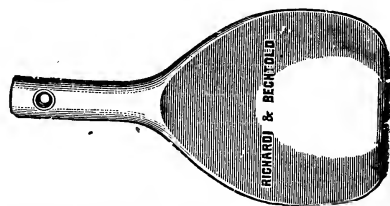
Made of heavy corrugated pasteboard, holding four one-pound prints.

Price, each, 10c.; per doz., \$1.00.

OAK BAIL BOXES.



Price, 8 qt., \$1.25; 4 qt., 95c.



Butter Ladles, 25c.



Creased Butter Spades, 15c.



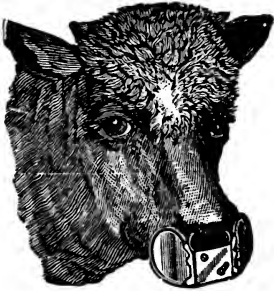
Plain Butter Spades, 12c.

Prices subject to change without notice. (See note on page 2.)

SMALL'S CALF FEEDER.

This is a device by which the calf may be fed away from its dam. and with any mixture of milk (or whatever else is healthful and desirable), with convenience and in the natural way, with that admixture of saliva which does not occur when calves drink from a pail.

Price, \$3.75. Extra nipples, 25c. each.



Rice's Weaner.

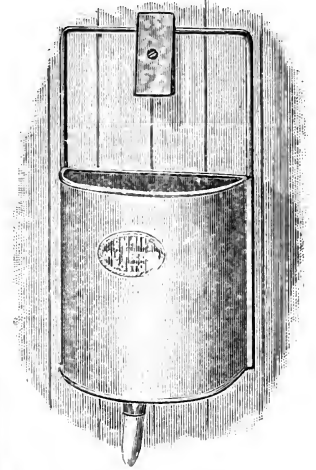
For preventing calves and cows sucking themselves or each other.

PRICE.

No. 1, for calves, **50c.**

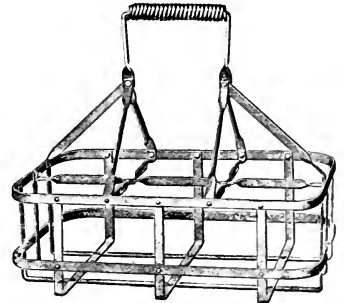
No. 2, for heifers, **75c.**

No. 3, for cows, **\$1.00.**



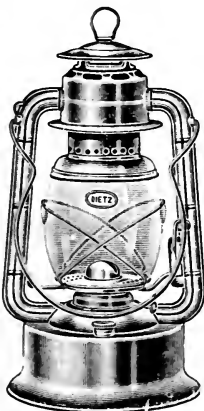
WIRE Milk Bottle Carriers.

2 quarts, round wire	\$1.00
4 quarts, round wire	1.15
6 quarts, round wire	1.55
8 quarts, round wire	1.85
6 quarts, flat wire	2.35
8 quarts, flat wire	2.85



DIETZ LANTERNS AND DRIVING LAMPS.

Neater, Trimmer, Better.
More convenient than any tubular lantern on the market

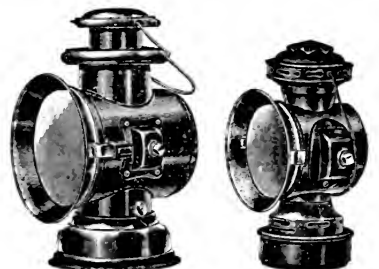


"Wizard" Lantern.

Can't spill oil, can't blow out.

Since Dietz introduced the original tubular lantern, nearly a half century ago, notwithstanding the fact that many inferior imitations have appeared, these manufacturers still enjoy the reputation of having the **largest output of lanterns of any concern in the world**, the goods holding their place by reason of their absolute merit, for they fill to perfection every requirement for which a lantern or lamp may be intended.

That it may not be forgotten that "Dietz" lanterns are "different" from a host of others, each lantern of the Dietz standard pattern will be tagged with a yellow quality tag bearing the Dietz trade-mark.

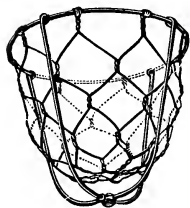


Driving Lamps.

We have in stock a full line of all the leading patterns. Prices furnished on application.

Prices subject to change without notice. (See note on page 2.)

OX MUZZLES.



Small, per pair, \$.65
Large, " " 1.00

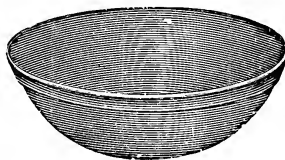
COW BELLS.



No. 1, 90c.
No. 2, 75c.
No. 3, 60c.
No. 4, 50c.

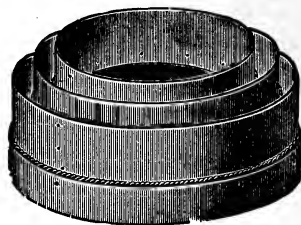
WOOD BOWLS.

OILED.



11 inch..... \$.25
13 "65
15 " 1.00
17 " 1.65
19 " 2.00

SIEVES.



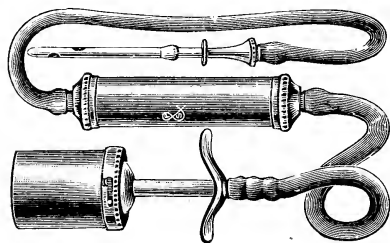
Wire Sieves, 12 inches..... 40c.
" " 13 " 45c.
" " 14 " 50c.

MILK OR CREAM BOTTLE CASES.

The case is designed to put the bottles in when filled with milk for delivery.

Wood, with heavy wire bottom and partitions (not removable).

Quart case, holding 12 quart bottles, : : : : : \$2.50
Pint case, holding 20 pint bottles, : : : : : 2.50



THE PILLING MILK FEVER OUTFIT. FOR STERILIZED AIR TREATMENT.

This Treatment Has Cured 97 per cent. of All Cases Treated.

Recommended by the Bureau of Animal Industry of the United States Government Department of Agriculture.

The outfit consists of the instrument, a roll of tape, a package of carbolized cotton and full directions.

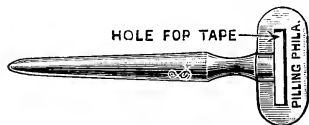
Price, \$3.50.

PILLING LEAD PROBE.

WITH FULL DIRECTIONS.

For the treatment of obstructed teats, also for enlarging the opening.

Price, 35 cents.



PILLING TEAT EXPANDER.

For Hard Milking Cows.

Price, 65 cents.

PILLING HARD RUBBER TEAT PLUG.

Especially designed for two purposes: First, to prevent dropping of milk in cows where there is relaxation of the little muscle at the end of the teat and consequent leakage of milk; and secondly, to dilate the canal of the teat above the muscle in cases where hard milking is due to contraction of this part of the canal.

Price, 65 cents.



MILKING TUBES.



For drawing milk from cows with sore or obstructed teats. Made from white metal, in 2½ and 3½ inch lengths, heavily plated with pure silver and warranted equal to solid silver ones in every respect, at about one-fourth the cost.

Price, 25 cents.

Prices subject to change without notice. (See note on page 2.)

Kow-Kure, Garget Remedy and Bag Balm.

The Cow's Health-First of All

To think of the milk yield first and the cow's health afterward is putting the cart before the horse. Many "poor milkers" only need to have their systems working properly to become good producers.

KOW-KURE, the great cow medicine, makes cows healthy and keeps them healthy. Working on the digestive and genital organs, it is a prompt, sure remedy for Abortion, Barrenness, Retained Afterbirth, Scouring, Lost Appetite and Bunches. Try KOW-KURE; druggists and feed dealers sell it—55c and \$1.10 packages.

Write for "The Home Cow Doctor," free.

DAIRY ASSOCIATION CO.,
Lyndonville, Vt.

KOW-KURE

Price, Kow-Kure 70c. and \$1.40 per can.

Grange Garget Remedy.




Positively cures garget without in any way injuring the cow.

Price, 70c. per can.

BAG BALM

MADE BY THE KOW-KURE PEOPLE



A Healthy Udder

means comfort for the cow and a generous, easy milk flow. Bag Balm, the great healing ointment, will keep the udder free from sores, chaps, cuts, bruises, cracks, bunches and inflammation. Bag Balm is especially effective at the calving period when caked bag frequently occurs. Its penetrating and softening effect is immediate. Every dairy should keep Bag Balm on hand.
Sold by druggists and feed dealers, in big 50c packages. Write for free booklet, "Dairy Wrinkles."

DAIRY ASSOCIATION CO., Lyndonville, Vt.

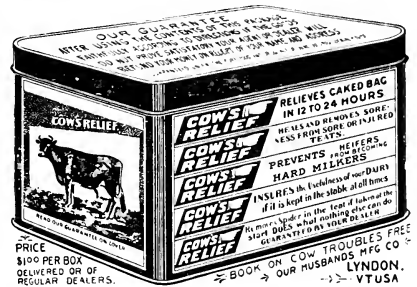
Price, 65c. per can.

COW'S RELIEF.

A standard remedy among dairy-men. A sure relief for caked udder, and will keep bag and teats free from soreness.

Price.

75c. and \$1.50 per can.



PRICE
\$1.00 PER BOX
DELIVERED OR OF
REGULAR DEALERS.

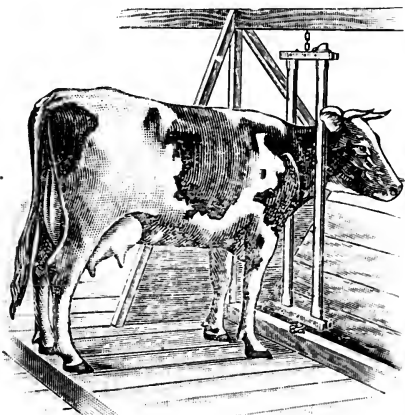
BOOK ON COW TROUBLES FREE
→ OUR HUSBANDS MFG CO. →
LYNDON, VTUSA

STANCHION BASIN.

An examination of this cut shows its advantages; can be emptied and cleaned in three minutes, without fouling supply pipe; is easily kept antiseptic, and can be quickly connected, being screwed on to the upright pipe inside of basin.



Price
on
application.



Robertson's Patent Chain Hanging Stanchions. Practical, Safe and Durable, and Afford Comfort to the Animal.

Made with Either Rigid or Adjustable Neck Space.

A pleased customer is the best possible endorsement that an article can have. These stanchions are in use by thousands of the most successful dairymen and farmers all over the country, who have had practical experience and know that these stanchions are not an experiment.

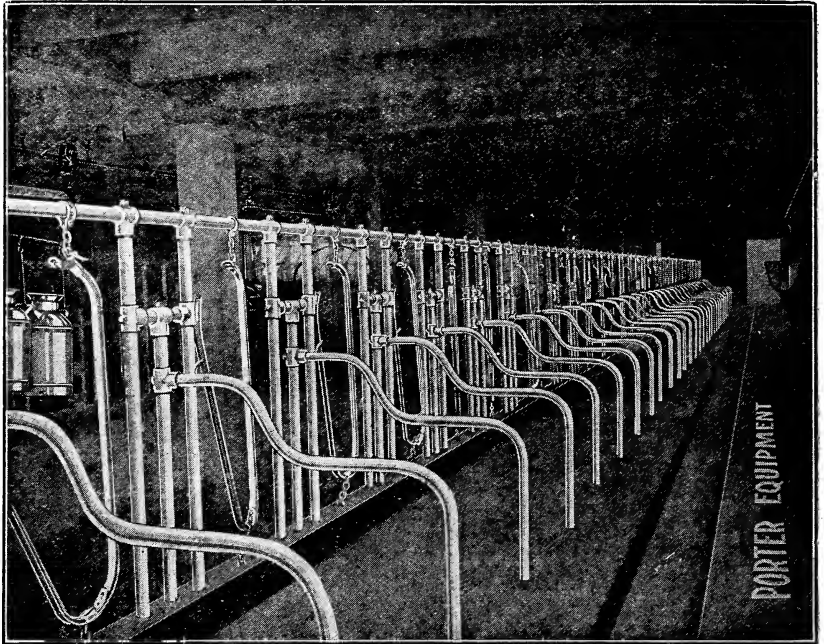
Write for price list.

Prices subject to change without notice. (See note on page 2.)

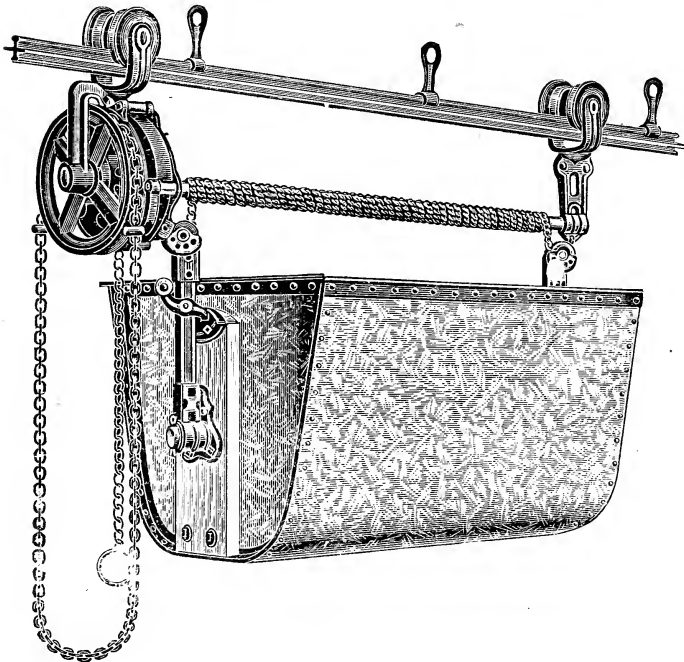
PORTER BARN EQUIPMENT.

The Cleanliness, Convenience and Comfort of Porter Equipment Will Swell Your Dairy Dividends.

The better care you give your cows, the better they will pay you. Stable them in light, clean, comfortable, sanitary quarters and they'll require less feed, keep freer from disease, produce more milk, with a higher percentage of butter fat, and your milk and butter will bring top-notch prices. These are **facts** proved over and over again in the experience of successful dairymen who are using Porter Litter Carriers, Feed Carriers, Stalls and Stanchions. Porter equipment in your barn will mean a big boost for extra profits, for it's built with practical, common sense understanding of the care the dairy cow needs for best results. It keeps the stalls clean, prevents waste of feed and manure—gives your cows the best chance to show what they can earn for you.



Expert Advice on Barn Plans and Equipment, Free for the Asking.

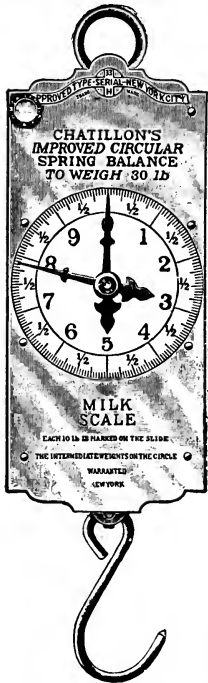


PORTER LITTER CARRIER.

With it one man can do the work of three, and do it better and easier. It is the handiest and most satisfactory litter carrier on the market. The chain hoist gives the biggest lift for the power and the quickest action. The hopper is made of heavy galvanized steel with capacity of 12 bushels; is held automatically at any height, and is provided with a dumping device, which is tipped at will by the man in the stable. Has one piece steel track, carrier wheels are roller bearing, and are swiveled so carrier will go around the sharpest curves safely. No end motion, no joggling, liquid litter will not slop over—the only litter carrier with a stationary arm.

Price on application.

Prices subject to change without notice. (See note on page 2.)



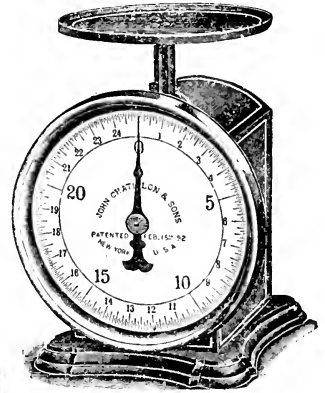
IMPROVED CIRCULAR SPRING BALANCE MILK SCALES.

USED BY MOST DAIRYMEN.

Weighing up to 60 pounds.

Weighing up to 30 pounds.

Price on application.



Favorite Family Scales!

Dial and Glass Sash, Handsomely Ornamented.

The pointer may be adjusted to balance the weight of a scoop, etc., by turning the thumb-screw on top of scale.

PRICE.

No. 047.	Complete with scoop, white dial,	\$6.00
No. 147.	“ “ “ tin dial,	4.75

"CYCLO" BALL-BEARING SWIVEL WHEEL SCALES.

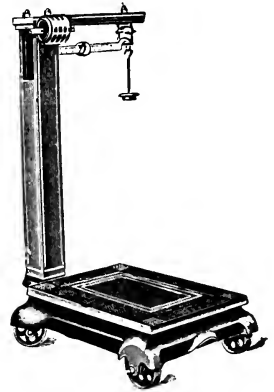
WEIGHING UP TO SIX HUNDRED POUNDS.

Are constructed with two swivel or caster wheels at the front or beam end of scale frame, combined with two stationary wheels at rear end of frame, which enables the operator to move the scale in any direction with the utmost ease.

The main frame platform and levers are made of smooth grey iron of ample weight and strength, all iron parts being finished in black Japan.

"Cyclo" Scales are fitted with hardened, flexible, lever bearing loops and platform bearing feet. The beam and crescent-shaped sliding poise are of solid brass, highly polished. All pivots are of best tool steel, carefully tempered and ground to a knife edge. Wood parts are of the choicest selection obtainable, well finished and handsomely striped in gilt.

Prices on application.



RAT CORN

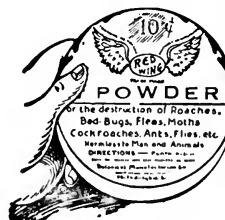


Rat corn kills rats, mice, gophers, prairie dogs, squirrels and other rodents, without odors. Mummifies them and they simply dry up. Is not a deadly poison, therefore can be used without danger to human beings. Keep away from fowl.

Prices, 25c., 50c. and \$1.00 per can.

By mail, 30c., 55c. and \$1.05.

RED WING POWDER



For the destruction of Roaches, Flies, Bed-Bugs, Moths, Mosquitoes, Lice, Chickens Lice, Ants, Red Ants, Fleas and certain other Insects. Harmless to Mankind and Animals.

**Red Wing Powder, in the round bellows,
10c. and 25c.**

By mail, 15c. and 30c.

Prices subject to change without notice. (See note on page 2.)



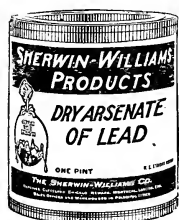
A Mark
of
Quality.

SHERWIN-WILLIAMS PRODUCTS

INSECTICIDES

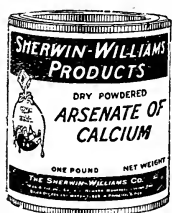
The Sherwin-Williams line of Insecticides and Fungicides is the most complete line on the market to-day. Their spraying materials are recognized as standard everywhere. The following brief descriptions are necessarily very general, but we will be pleased to give full information on request. When you are ready to spray it will pay you to see us.

S-W DRY POWDERED ARSENATE OF LEAD.



One of the oldest and most effective insecticides on the market, and can be used for spraying all kinds of fruit with perfect safety. Contains from 30 to 33 per cent. arsenic oxide thoroughly in combination with lead and less than one per cent. water soluble arsenic. This means unquestionable effectiveness without danger of burning foliage. S-W Arsenate of Lead is extremely fluffy, therefore covers more foliage and stays in suspension longer than most leads on the market. Can also be dusted. For general spraying 1 to 1½ pounds to 50 gallons of water will be found very effective.

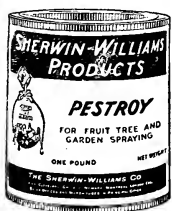
S-W DRY POWDERED ARSENATE OF CALCIUM.



Similar in most respects to Arsenate of Lead, and can be used for virtually the same purposes with good results. Especially recommended for potatoes and seed fruits, but not recommended for stone fruits, such as peaches and plums. Recent government experiments would indicate this product to be a very successful dust against the cotton boll weevil. Cheaper than Arsenate of Lead.

For general use from ¼ to 1 pound to 50 gallons of water, with several pounds of good lime added, is very effective. For dry dusting mix with 8 to 10 parts gypsum or some similar carrier.

S-W DRY POWDERED PESTROY.



gallons of water.

A combination of Bordeaux Mixture and Arsenate of Lead designed especially to save the grower the time and trouble of making up and combining Bordeaux Mixture and Arsenate of Lead mixture. Especially recommended for fruit trees and general truck crops, for the control of leaf-eating insects and fungous diseases, such as blight, rust, wilt, etc. Should be used 7 pounds to 50

S-W DRY POWDERED TUBER-TONIC.



of 7½ pounds to 50 gallons of water.

A combination of Paris Green and Bordeaux Mixture developed especially for potatoes. Controls both bug and blight at one operation. Has the quick-killing properties of Paris Green, the adhesiveness of Arsenate of Lead and the fungous preventative qualities of Bordeaux Mixture. Unlike Paris Green it remains on the foliage even when subjected to heavy dews. Should be used at the rate

S-W PARIS GREEN.



One of the oldest and most reliable Paris Greens on the market. Its high quality is recognized everywhere, and many years of use have proven its efficiency. Very light and fluffy, insuring good suspension in the spray tank and thorough covering of the foliage. Contains approximately 56 per cent. arsenious oxide and less water soluble arsenic than is allowed by the law, so carefully combined that danger of burning is reduced to a minimum. In using Paris Green conditions vary greatly, but for general purposes ½ to 1 pound to 50 gallons of water is very satisfactory.

S-W DRY LIME-SULFUR.



The only true Dry Lime-Sulfur on the market. Has all the advantages of the liquid material with the disadvantages eliminated. Its effectiveness has been proven by thousands of orchardists and experimental stations. Protected by U. S. Patent No. 1,254,908. A 100 pound drum will do the work of a 600 pound barrel of Liquid Lime-Sulfur, thereby eliminating freight on 500 pounds. This in itself is a big saving, and when it is considered that danger of freezing, leaking, etc., is also eliminated and cartage bills reduced, there is no comparison. Can be carried over from season to season without deterioration. For dormant spraying use approximately 12 pounds to 50 gallons of water, and for summer spraying from 1½ to 3 pounds to 50 gallons of water, in combination with the usual proportion of Arsenate of Lead.

Prices quoted on complete line on application.

Prices subject to change without notice. (See note on page 2.)

Special Attention is Called to Our

Stock of

..Insecticides..

Atomizers, Sprayers and Spray Pumps

————— INCLUDING —————

Bug Death, Dry Arsenate of Lead, Paste Arsenate of Lead, Paris Green, Lime-Sulfur, Tuber-Tonic, Aphine, "Black Leaf 40," Bordeaux Mixture, Hellebore, Tree Tanglefoot, Kerosene Emulsion, "Nico-fume" Liquid, Cut Worm Killer, Tobacco Dust, Weed Killer, Sheep Dip, and Cattle Oil.

New Misty, Midget, Rapid, Easy, Canteen and Acme Atomizers.

Champion and Acme Powder Guns. "Auto Sprays," "Kant-Klog" and Perfection Hand Sprayers. Gould's "Pomona," Standard, Myers' Ideal and "Iron Age" Power Sprayers. Myers' No. 329 Sprayer (for whitewashing), Gould's Cistern, Pitcher and Force Pumps,

————— ALSO —————

Spray Pump Fittings, including Nozzles, Bamboo Extensions, Hose Couplings, Valves, Rods, Bushings, Packing, etc.

➡ SEE OTHER SIDE ⬅

We Ask Your Careful Examination of the Following Complete and Up-to-Date Stock of

Walking Plows, Sulky Plows, Disc Harrows, Spring Tooth Harrows, Spike Tooth Harrows, Hand Cultivators, Riding Cultivators, Wheel Hoes, Seed Drills, Seed Sowers, Fertilizer Drills, Fertilizer Sowers, Grain Drills, Weeders, Potato Hoes, Hand Garden Cultivators, Manure Spreaders, Land Rollers, Corn Planters, Potato Planters, Mowers, Rakes, Tedders, Corn Binders, Grain Binders, Potato Diggers, Grain and Bean Threshers, Tractors, Gasoline Engines, Saw Machines, Feed Mills, Corn Shellers, Ensilage Cutters, Feed Cutters, Root Cutters, Fan Mill, Cider Mills, etc., also

“EXTRAS”


— FOR —

Cultivators, Seeders, Harrows, Plows, Grain and Fertilizer Drills, Spreaders, Planters, Rollers, Mowers, Rakes, Tedders, Diggers, Binders, Ensilage Cutters, Feed Mills, Threshers, Gasoline Engines, etc.



CAREFUL ATTENTION GIVEN ALL ORDERS FOR MACHINE “EXTRAS.”

*IN ORDERING “EXTRAS” PLEASE CAREFULLY SPECIFY
MAKE OF MACHINE, AND NUMBER OR LETTER OF PART
WANTED.*

 **These lines we intend to have in stock at all times, and we solicit your valued orders, which we will endeavor to ship promptly.**

. . . WRITE FOR PRICES . . .

"BUG DEATH."

The multiplication of insect pests and increase of fungous diseases place the question of spraying outside the line of debate. *It must be resorted to. It is the only salvation of the fruit, vegetable or crop producer. Spraying is a necessity for successful cropping.* There is one insecticide on the market *absolutely harmless to animal life, which will kill the bugs and insects, protect the life of the leaves and plants, increase the yield, insure highest quality and promote the vigor of the plant or tree.*

Bug Death will do all this, for it is the only insecticide on the market which feeds and strengthens the leaves while destroying the pest which otherwise would destroy the crop, killing the potato, squash and cucumber bug, currant and tomato worm, and all other plant and vine-eating pests.



DIRECTIONS FOR SPRAYING ONE ACRE OF POTATOES.

Fill a pail holding about 12 quarts half full of water. Stir 15 to 25 pounds of Bug Death into this water. Fill sprayer tank nearly full with clear water, then pour Bug Death from bucket into tank and start machine at once, being sure that the agitator is working properly.

IF USED DRY

apply with Dickey Bug Death Duster or B-D Sifter at the rate of 15 to 25 pounds per acre, per application. Dust plant evenly and thoroughly. The more freely used the better the plant will thrive, as the increased yield and improved quality more than pay the expense. A perfectly sure, safe, effective insecticide.

1 pound package (is provided with a sifter top, making it easy to distribute contents on to plants or vines)..... \$.20
3 pound package..... .45

5 pound package..... \$.70
12 1-2 pound package..... 1.50
100 pound keg..... 9.00



DICKEY BUG DEATH DUSTER.

Price, 55c.

B-D Sifter.

Price, 75c.



BUG DEATH APHIS.

A NON-ARSENICAL INSECTICIDE AND FUNGICIDE FOR MANY PLANT-EATING AND SUCKING INSECTS.

For sucking insects, lice, aphis, flea beetles and fungus this preparation is offered with full confidence in its protective as well as destructive power. *There is no place where it can work injury, its sole mission being to protect and save.* For the currant worm, the flea beetle, the rose or tree aphis, as well as other forms, its destructive power is assured. The housewife will here find the ideal agent to use for the health of all house plants, and the greenhouse worker be assured security from all necessity for using any of the arsenical preparations; the orchardist find here the ideal dust for his trees, carefully mixed, *ready for use*; the gardener be insured against attacks from those pests and diseases which so often work serious injury.

12 oz. package, 20c.; 80 lb. drum, \$9.00.

Prices subject to change without notice. (See note on page 2.)

"BLACK LEAF 40."

To Destroy Green and Rosy Apple Aphis, Woolly Aphis, Cabbage Aphis, Lice on Fruit Trees, Shrubs, and on Garden and Sweet Peas, and all Forms of Soft-Bodied Sucking Insects, without Injury to Foliage. Spray with

"BLACK LEAF 40," SULPHATE OF NICOTINE.

"Black Leaf 40" is highly recommended by experiment stations and spraying experts throughout the entire United States. Owing to the large dilution, neither foliage nor fruit is stained. Also "Black Leaf 40" is perfectly soluble in water—no clogging of nozzles.

Price: 10 lb. can, \$13.75 (makes 1,600 to 2,000 gallons for spraying tree lice, with the addition of 2% distillate oil emulsion; or 1,000 gallons for spraying green and woolly aphids, with the addition of three or four pounds of any good laundry soap to each 100 gallons of water); 2 lb. can, \$3.25; 1-2 lb. can \$1.00; 1 oz. package, 25c.

Sterlingworth Whale Oil Soap and Tobacco.



This is a most effective and cheap remedy for destroying San Jose scale, oyster shell scale, plant lice and sucking insects on trees, shrubs, plants, vines, rose bushes, etc.

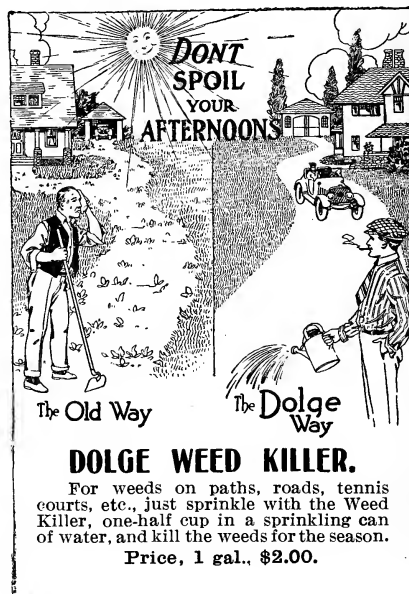
Price, 1 lb. box, 35c.

NO-SCAB.

FOR PREVENTING POTATO SCAB AND CERTAIN GRAIN SMUTS.

For potato scab, and to destroy other germs on seed potatoes, soak two hours in Sterlingworth No-Scab, 1 pound to 15 gallons of water. Dry the potatoes after soaking.

Price, 1-2 lb. (1-2 pt.) bottles, 50c. each. Mailing weight, 2 lbs.



"NICO-FUME" (Liquid).

A highly refined tobacco extract, containing 40% "free" nicotine, which may be used both for spraying and for fumigating.

Price, 1 lb. can, \$2.00; 1-4 lb. can, 65c.

APHINE.

Not a cure-all, but a specific remedy for sap-sucking insects infesting plant life, such as green, black or white fly, thrips, red spider, mealy bug and soft scales.

Price, 1-4 pt., 25c.; 1-2 pt., 40c.; 1 pt., 65c.; 1 qt., \$1.00; 1 gal., \$3.00.

STERLINGWORTH WEED KILLER.



Sterlingworth Weed Killer is a most satisfactory and powerful weed Killer compounded especially for use on walks, drives, tennis courts, golf links, etc. It is a dry powder to be dissolved in water, and may be applied with an ordinary watering can. One gallon covers three to four square yards.

Price, 1 lb. package (makes 15 gals.), 50c.

Creosote.—For destroying eggs of gypsy moth.

Price, 1 qt., 60c.; 1 gal., \$1.50.

Tobacco Dust.—Price, 10c. per lb.; 5 lb. pkg., 30c.

Tobacco Stems.—Price, \$2.00 per 100 lbs.

Prices subject to change without notice. (See note on page 2.)

TREE TANGLEFOOT.

A safeguard for trees against the gypsy moth, canker worm, and all climbing insect pests. It should be applied before the foliage appears, a continuous band two inches in width being put around the trunk of the trees three or four feet from the ground. One pound will make a band seven to nine feet long. Perfectly harmless to the trunk (unless where the trees are very young and the bark thin and tender, in which case bind manila paper around the trunk before applying Tanglefoot) and remains sticky during hot, cold or wet weather.

Price: 1 lb. can, 50c.; 3 lb. can, \$1.45; 10 lb. can, \$4.50; 20 lb. can, \$8.75; 25 lb. can, \$10.50.

INSECT-BAN TREE TAPE.

PROTECTS FRUIT AND ORNAMENTAL TREES

From Caterpillars, Worms, Insects and all Crawling Pests.

A tape saturated with a powerful **Insect Repellent**. The shield protects the tape from the weather. No caterpillar, worm or insect can pass it. Not injurious to man, bird, animal or any lung-breathing organism.

Shipped in rolls. The user cuts to suit and bands the tree trunk.

LASTS A SEASON—PROTECTS FOR A SEASON.

Price, 30 foot roll, \$1.50.



This is prepared exclusively for aphids or plant lice and spiders on house plants and vegetables. It is useful against most of the small sucking insects which infest house plants and greenhouse flowers. It is used by diluting one part of Killer in fifteen parts of water and may be applied by spraying or sprinkling.

Price, pint, 25 cents.

Sterlingworth Kerosene Emulsion.

A valuable remedy against scale, plant lice, etc.

PRICE.

Pint can,	.	.	\$.30
Quart can,	.	.	.50
Gallon can,	.	.	1.25

**STERLINGWORTH BORDEAUX MIXTURE.**

Bordeaux Mixture is a preventive of potato blight, potato rot, mildew, leaf blight of shrubs and fruit trees, and, in fact, for all fungoid diseases. Apply as a fine spray to all parts of the plants liable to be affected.

PRICE.

Quart, 50c.; gallon, \$1.25; 5-gallon cans, \$5.50. In barrels of about 50 gallons, 75c. per gallon.

STERLINGWORTH HE-BO.

A SUBSTITUTE FOR POWDERED HELLEBORE.

Will be found satisfactory for use against rose slugs, currant worms, cabbage worms, and many other leaf-eating insects where a milder poison than Paris Green or Arsenate of Lead is desired. For many uses He-Bo is superior to much of the hellebore sold for killing insects.

Price, 1-2 lb., 25c.; 1 lb., 45c.

**STERLINGWORTH ANTI CROW CORN OIL.**

PROTECTS NEWLY PLANTED CORN FROM CROWS.



Dip a stick into a can of Sterlingworth Anti Crow Corn Oil and stir it around in a peck of corn until the corn is darkened a little. Then expose it to the sun until dry, so it will run through a seeder, or you can mix a gallon of Sterlingworth Anti Crow Corn Oil with two gallons of hot water and add the corn while stirring. The oil will give it a thin crow-protecting coat, which is the easiest and cheapest way of protecting your newly planted corn from crows and blackbirds. Price, pint, 35 cents.

STERLINGWORTH CUTWORM KILLER.

A preparation which is quick and sure in effect on worms and non-poisonous to animals. Dead cutworms may be seen wherever there are cutworms and Sterlingworth Cutworm Killer has been used. To protect plants in hills, sprinkle a small quantity of Killer around the plant. When in rows, sprinkle both sides of row.

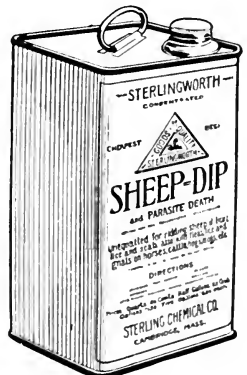
One pound is sufficient for 175 plants when in hills, and 150 linear feet of plants when in rows.

1 lb. sprinkler-top boxes, 30c.

**STERLINGWORTH SHEEP DIP.**

A highly concentrated, non-poisonous liquid for sheep-washing purposes, killing ticks and lice, curing scab and promoting the growth of wool and flesh. Used also for cattle, horses, pigs, fowls, dogs, etc. A protector of sown seed from birds, slugs and "smut." Does not require heating nor any preparation—simply add cold water and it is ready for use. Easily applied and always effective.

Price: 1 qt. can, 60c.; 2 qt. can, \$1.00; per gallon, \$1.75.



Prices subject to change without notice. (See note on page 2.)

PROTECTS
STOCK FROM
FLIES.

GUARANTEED CATTLE OIL

READ THIS GUARANTEE.

Buy a can of Guaranteed Cattle Oil. Use it as directed and if it does not protect your cattle and horses from flies and mosquitoes to your satisfaction, you to be the judge of what constitutes satisfaction, return the empty can to the dealer from whom you made the purchase and he will return to you the purchase price. We leave the matter of what constitutes satisfaction entirely to your honor. All we ask is that you use it as directed, give it a good, honest, fair trial and treat us as you would wish to be treated if our positions were reversed.

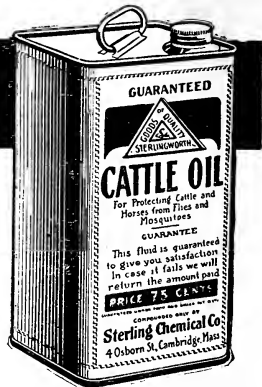
This is the seventh season we have sold **Guaranteed Cattle Oil**. During the season just closed we have sold more of it than of all other fly oils combined and it has given universal satisfaction. We did not receive a complaint from what we sold in 1920, although the above guarantee was plainly printed on every can.

We believe **Guaranteed Cattle Oil** to be the most lasting and satisfactory fly repellent for use on cattle and horses that was ever offered. It is also, to some extent, useful against lice on cattle, but we recommend Sterlingworth Lice Powder for lice on young stock, cattle and horses.

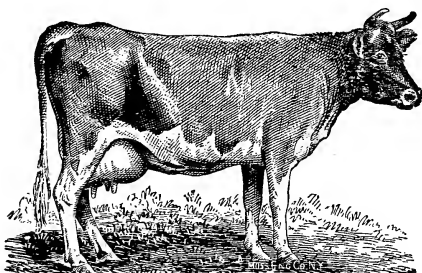
Flies hit by **Guaranteed Cattle Oil** are killed. Others are kept off by odor arising from it. It may be applied with ordinary hand sprayer. A small quantity covers a large surface. It is very economical to use.

Remember every can is guaranteed to give satisfaction or price is refunded without quibble or question. We carry large stocks and are prepared to supply dealers promptly.

Prices: 1 qt. cans, 40c. each; 1 gal. cans, \$1.25 each.



EUREKA FLY KILLER.



Will protect horses and cattle from the annoyance of flies, insects and vermin of all kinds. A much greater flow of milk obtained from cows kept free from the torment of flies.

As a disinfectant it will keep animals healthy.

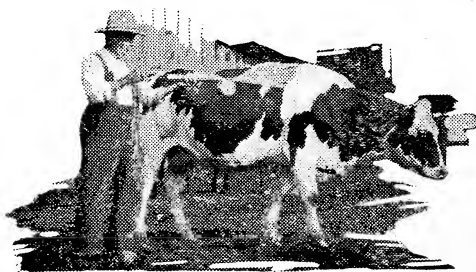
Applied to the walls and ceilings of stables, where there are myriads of flies, they leave instantly.

Apply with any of our atomizers or sprayers.

Price, per gallon, \$1.25.

SHERWIN-WILLIAMS FLY-SPRAY.

Keeps Flies off Cattle and Horses.



Will protect horses and cattle from annoyance of flies, lice, tick and other vermin.

Fly-Spray increases milk yield and will not gum the hair. It is also effective for use in poultry houses.

Fly-Spray is absolutely harmless and application should be made as often as necessary.

Put up in one and five-gallon cans and barrels.

Price, \$1.25 per gallon.



A most efficient spray to protect cattle and horses from flies. Antiseptic and non-poisonous. Used in hen houses to kill lice.

Flies breed in manure heaps and go from place to place carrying disease germs along with them. Flies are responsible for many of the epidemics that appear among people and animals.

If their breeding places are regularly sprayed with **Creonoid** they cannot breed and the number around the buildings will be greatly diminished.

Price, gallon, \$1.25.



Prices subject to change without notice. (See note on page 2.)

BARN DOOR HANGERS.

NO. 3.

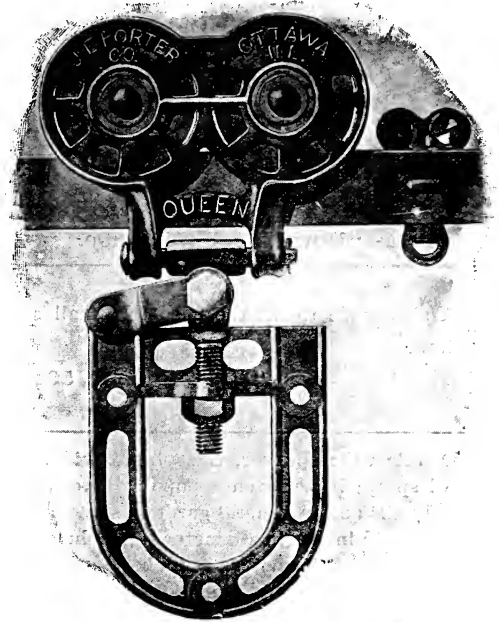
PORTER QUEEN.

They are made right and give the best service in the most satisfactory way.

They have both vertical and lateral adjustments and will fit doors of various thickness and weights.

The wheels have roller bearings, and it's impossible for the trucks to be thrown from the track.

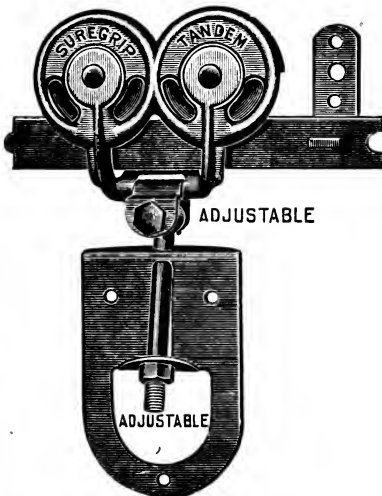
Price on application.



NO. 3. QUEEN BARN DOOR HANGER.
Weight, per pair, 9 pounds.

MYERS'

SURE GRIP ADJUSTABLE TANDEM DOOR HANGERS.



This hanger is adjustable in all parts. The perpendicular and lateral adjustments are made with an ordinary wrench and at the will of the user. It has hard steel roller bearings and will fit any thickness of door. The track is heavy special high carbon stiff steel, 3-16 x 1 1-4 inches, supported by rigid brackets with a square shoulder mortised through the track.

Price on application.

Prices subject to change without notice. (See note on page 2.)

SPRAYERS AND POWDER GUNS.

For Spraying all Insecticides on Potato Vines, Shrubs, Small Trees, House Plants, Live Stock and Poultry.

A great Labor Saver on the Farm and in Every Garden, Barn, Greenhouse, Orchard and Hennyery.

Will apply the finest possible spray on any object desired, and exterminate any kind of insect life.

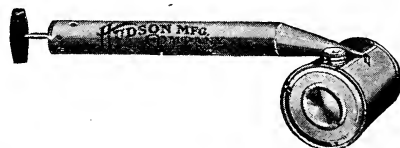


"New Misty" (Tin), 60c.

Quart size sprayer made of selected stock and carefully tested before packing. The method of construction, with the pump passing through the top of the can, keeps the air nozzle and spray tube in a straight line, and adds to the strength of the entire sprayer.

Pump is $1\frac{3}{4}$ inches in diameter, 14 inches long; tank is 4 inches in diameter, $4\frac{1}{2}$ inches long. All seams locked and soldered.

A size made to fill the need for small sprayer for household requirements.



"Midget" (Tin), 50c.

Double tube sprayer, throwing a wide, fan-shaped spray; has proven a popular favorite for using fly oils and in general garden use.

Pump, $1\frac{3}{4}$ inches in diameter, 14 inches long; tank, 4 inches in diameter, $4\frac{1}{2}$ inches long. Galvanized or brass. Holds one quart. Carefully tested double tubes. Length over all, nineteen inches.

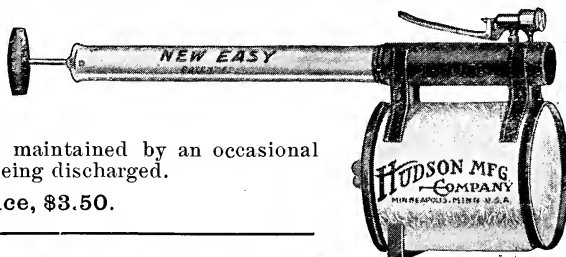


"Rapid" (Galvanized Iron), 75c.

The "Easy" Compressed Air Sprayer.

Made of heavy galvanized steel throughout, with sufficient capacity for one gallon of liquid. Has a powerful pump with which pressure can be maintained by an occasional stroke as the liquid is being discharged.

Price, \$3.50.

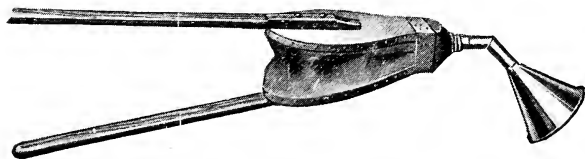


"Acme" (Tin), 60c.

"CANTEEN" (Brass), \$1.50.

Weights only one pound, holds one and one-half pints.

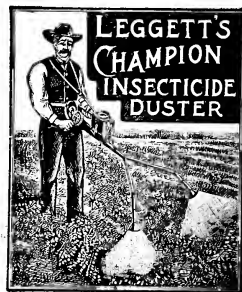
Well and simply made of heavy tin, combined into the strongest possible shape, and cannot come apart.



"Acme" Powder Gun, \$1.75.

and well finished throughout, making a neat, attractive and serviceable implement.

Well made, with solid hard wood head block, hard wood handles, best leather for the bellows (extra elbow furnished to tilt the funnel for getting under the leaves of plants and shrubs),



LEGGETT'S CHAMPION
DRY POWDER GUN.

Will cover two rows of potatoes at once, as fast as a man walks. Adjustable to any width of row. Distributes Paris Green, hellebore, sulphur, lime, "fungiroid," tobacco dust, etc.

Price, \$15.00.

Prices subject to change without notice. (See note on page 2.)

DIRECT CONNECTED PUMPING OUTFIT.

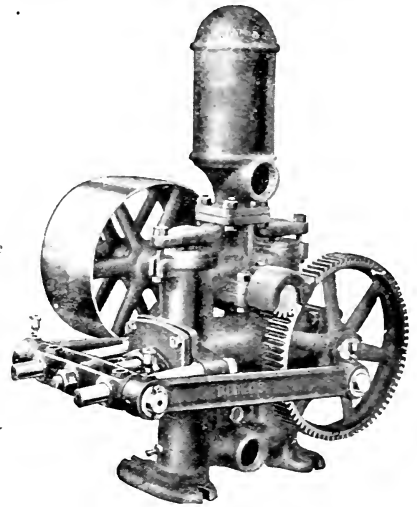
GOULD'S PYRAMID DOUBLE-ACTING PUMP.

NO VIBRATION AND PERFECT ALIGNMENT AT ALL TIMES.

Table of Various Combinations.

Engine Horse Power.	Pump Diameter.	Pump Stroke.	Gallons Per Minute.	Suction Inches.	Discharge Inches.
1 to 2	2½	4	6 to 12	1½	1½
1½ to 3½	3	5	8 to 15	1½	1½
2 to 3½	4	5	15 to 30	2	2
2½ to 3½	5	5	25 to 35	2½	2½

The power required for these outfits depends upon the capacity and pressure desired.



GOULD'S HAND FORCE PUMPS.

When large quantities of water must be pumped, as for watering cattle, etc., a pump such as the Gould's "Lift" Pump is used. This pump is made to deliver large quantities of water and is built extra strong.

When it is necessary to force the water to a higher level than the spout or to have it delivered with considerable force for washing wagons, sprinkling the garden, etc., it is necessary to use a force pump such as Gould's "Star" Force Pump.

When a constant even stream is desired, one of Gould's Double-Acting "Empire" Pumps is used. This pump has two cylinders and delivers water on both the up and down strokes, giving a steady flow at the spout.

For deep well service the pumps are similar to those shown except that the cylinder is lowered within fifteen feet or less of the water and preferably below the water level. Heavier construction is also used when the pumps operate over very deep wells.



"Star" Force Pump.
Anti-Freezing.
Fig. No. 1153.



"Empire" Double-
Acting Force Pump.
Fig. No. 1362.



"Star" Lift Pump.
Fig. No. 1018.



Gould's Pump Jack.
Fig. No. 1560.

Price on application.

Prices subject to change without notice. (See note on page 2.)

MYERS' HOUSE PUMPS.

MYERS' LONG STROKE PITCHER PUMP.

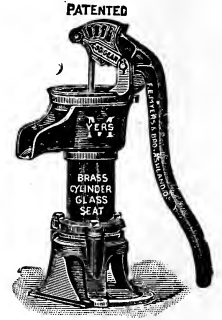
Fig. 416.



Fitted with brass valve sheet. This pump is built to fill the requirements of a pitcher pump where capacity is considered. Cylinder is bored and highly polished. Handle arranged to drop water to prevent freezing.

MYERS' BRASS CYLINDER PITCHER PUMP.

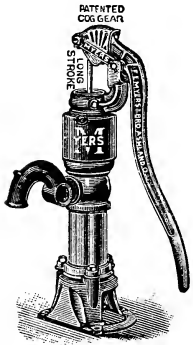
Fig. 220.



Built in strictly first class manner, with seamless drawn brass cylinder, rubber fiber check and revolving top.

MYERS' COG GEAR HOUSE LIFT PUMP.

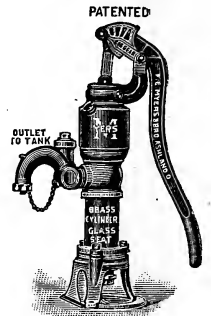
Fig. 245.



With siphon spout fitted with 3-inch, brass cylinder glass valve seat, patent drop valve.

MYERS' LONG STROKE COG GEAR, DOUBLE ACTING HOUSE FORCE PUMP.

Fig. 251.



This pump has brass upper and 3-inch brass lower cylinder, with patent glass valve seat. A satisfactory pump for forcing water to an elevation or into a tank.

RUMSEY PITCHER SPOUT PUMP.



Fig. 99 1-2.

These inexpensive pumps are suitable for lifting water from wells and cisterns not more than twenty-five feet deep. They are intended for use over kitchen sinks, but are often placed out of doors on open or shallow drive wells.

Rumsey Pitcher and Round Spout are sturdy little pumps that will last indefinitely. The only parts subject to wear are the valve and plunger leathers. By giving the inside of the cylinder a high polish and using a superior grade of hydraulic leather, we have more than doubled the life of these packings.



Fig. 100.

Price on application.

Prices subject to change without notice. (See note on page 2.)



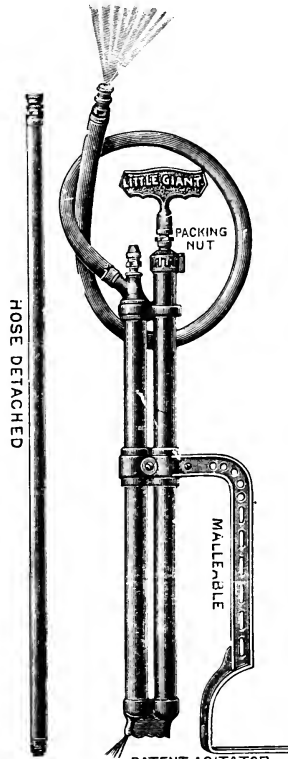
No. 661.

GOULD'S Brass Jacket Drive Well Point.

This well point is made of galvanized iron pipe with elliptical holes punched of uniform size an equal distance apart. It contains the greatest number of holes possible to punch in a pipe and retain sufficient strength for driving. It is covered with a brass wire cloth which is protected by a heavy perforated brass jacket. The drive point is iron, swaged into the pipe and riveted.

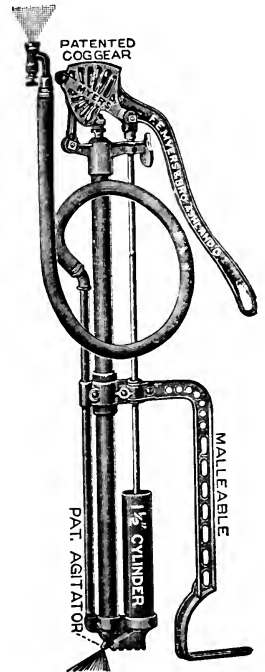
Write for quotations.

MYERS' SPRAY PUMPS.



BRASS BALL VALVES

No. 327 1-2.



No. 324.

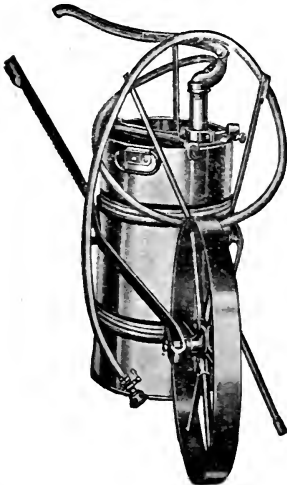
No. 327 1-2. Myers' Little Giant Brass Spray Pump, with agitator, complete with hose and Imperial combination fine and coarse spray and solid stream nozzle.

No. 324. Myers' Cog Gear Brass Spray Pump, with agitator, complete with hose and graduating Ver-morel fine and coarse spray and solid stream nozzle.

Price on application.

With Bordeaux nozzle for spraying whitewash, \$1.25 additional.

BROWN'S AUTO-SPRAY NO. 3-D.



General purpose orchard, field and whitewash sprayer. We recommend this Auto-Spray for whitewashing buildings. The pump itself is on the principle of a force pump and will generate a pressure of at least 150 pounds to a square inch. Care should be taken each time after whitewash is used in this or any sprayer. All the parts should be thoroughly cleaned. It is not a bad idea after the pump has been cleaned to pump a few gallons of water through the pump.

IN DETAIL.

Tank—Heavy galvanized steel.

Pump—Plunger style. Graphite packing, adjustable by tightening the nut on the top of plunger head. No leather cups.

Plunger—Brass $1\frac{1}{2}$ " in diameter. 3" to 5" stroke as desired.

Valves—Brass ball valves.

Suction Pipe—Fitted with brass strainer.

Agitation—Mechanical and effective. Operated from the handle.

EQUIPMENT.

8 ft. high pressure $\frac{3}{8}$ " hose, lever shut-off and latest pattern screen nozzle.

Auto-Spray No. 3-D, capacity 12 gals., with truck, 20" wheel.

Iron Extension Rod.

Price on application.

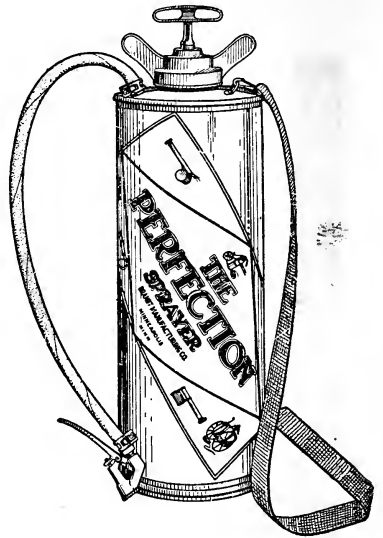
Prices subject to change without notice. (See note on page 2.)

"PERFECTION" SPRAYER.

Built on the best lines, of high-grade material, and with the idea of producing a sprayer which has none of the faults and defects so common in many Knapsack sprayers heretofore on the market.

The tanks are made of heavier metal than has ever been used in sprayers of this kind, are lock seamed at the corners to convex heads of metal two gauges heavier than the sides. A single seam runs lengthwise of the tank. This seam is reinforced by rivets, making the tank practically unbreakable. The pump is 1 $\frac{3}{4}$ -inch seamless brass tubing with a brass valve, and is sealed into the top of the tank with heavy threads, following the construction used in the best makes of fire extinguishers. The pump rod is 5-16 inch and is fitted with leather and special metal expanders.

The hose is attached to the sprayer at an angle, so that it will not kink and become cracked and broken. The shoulder strap is attached with snaps and can be quickly and easily removed. The hose is $\frac{3}{8}$ -inch 5-ply cloth inserted and is equipped with automatic shut-off nozzle.



These sprayers are furnished in **galvanized steel** or **brass** as ordered. Weight, 9 lbs. empty. All sprayers tested to 60 lbs. before leaving factory.

Price on application.

"KANT-KLOG."

Sprayer body is made of heavy polished brass or galvanized steel, as desired. Top and bottom are dome shaped, joined to body under heavy pressure, making a complete double seam. The body is supported and further strengthened by a heavy steel band around the bottom.

Style G, with **galvanized steel** or **polished brass** body, as ordered, brass air pump, hose, escape valve, "Kant-Klog" nozzle, spring shut-off and carrier strap.

*Price
on
application.*

Auto-Spray No. 1.

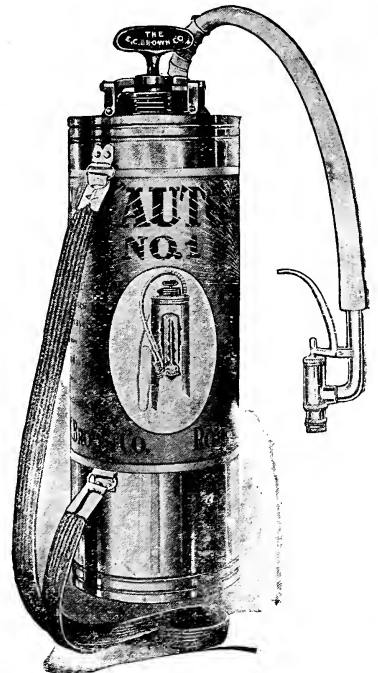
COMPRESSED AIR SPRAYER.

The strongest and most simple in its working parts of any compressed air sprayer. Two pumpings of about fifteen strokes on the plunger will discharge the contents under high and constant pressure. After pumping, the operator has nothing to do but direct the spray. Sprayer is equipped with patented **non-clogging** nozzle.

This sprayer consists of a solution tank holding four gallons, made of galvanized steel or heavy sheet brass, as ordered, and a brass air pump, the cylinder of which is made of seamless tubing, located inside of the solution tank, protected from injury, and provided with cam locking device, which closes the filler opening air tight with a half turn of the pump handle.

The entire machine is made without screws or bolts, and no tools of any kind are required to take it apart.

Price on application.



Prices subject to change without notice. (See note on page 2.)

AUTO-SPRAY NO. 5.

In a Class by Itself.

This pump is the ideal all-purpose hand sprayer. It may be used for spraying trees, vines, garden truck, potatoes, and any field crop.

This pump is made entirely of brass.

The nozzles regularly furnished with this pump are of special design so this sprayer can be used on trees, the height of an apple tree as well as on bushes near at hand.

This pump can be used with any receptacle the user may possess for spraying, where the outfit does not necessarily have to be portable, when purchased as shown in cut Figure 468. Where there is any field work to be done and the sprayer has to be moved constantly about, we advise purchasing with this pump a knapsack tank as shown in Figure 483.

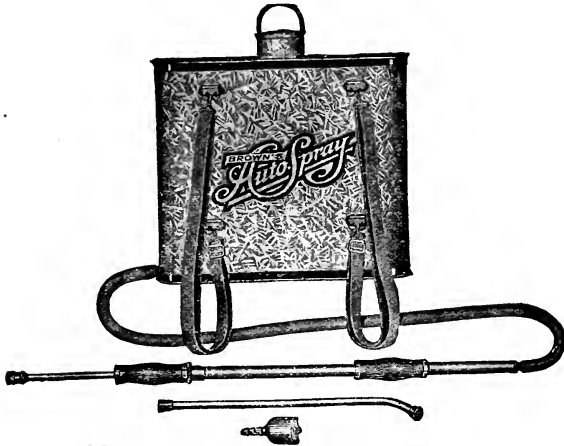


Fig. 483.

THE MYERS' DOUBLE ACTING COG GEAR, COMPLETE SPRAY PUMP OUTFIT, NO. R316B.

Mounted on Skids with 50 Gallon Barrel and Mechanical Agitator.

With brass valves and ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp packed plunger.

SPECIAL FEATURES: Cog gear movement, increased leverage adapted for spraying under heavy pressure, mounted complete, occupying smallest possible space. Capacity sufficient for eight nozzles; well adapted for spraying potatoes.

Pump complete, 55 gallon barrel mounted on skids, with pressure gauge, one 15-foot lead, $\frac{1}{2}$ -inch, 5-ply discharge hose, one Fembro nozzle, one 8-foot pipe extension with lever shut-off and mechanical agitator.

Price on application.

Prices subject to change without notice. (See note on page 2.)



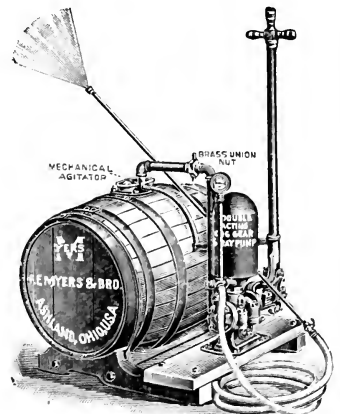
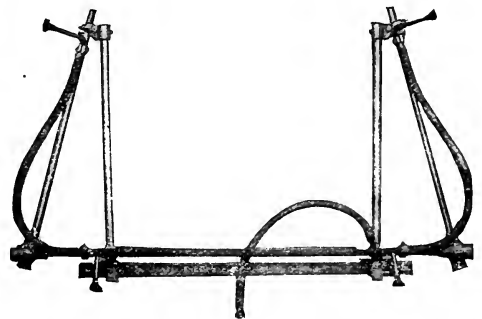
Fig. No. 468.

SPRAY BOOM.

Four-Row.

This boom is adjustable both horizontally and perpendicularly. By moving the spray boom proper on the uprights, you can raise or lower the nozzles, as required. Then by moving the clips on the horizontal bar the nozzles can be so placed to spray rows of a number of different widths.

This boom is made so that the ends can be swung up, as shown in cut, so that sprayer can be drawn on the road or through a gate without danger of the boom being broken off by any obstruction.



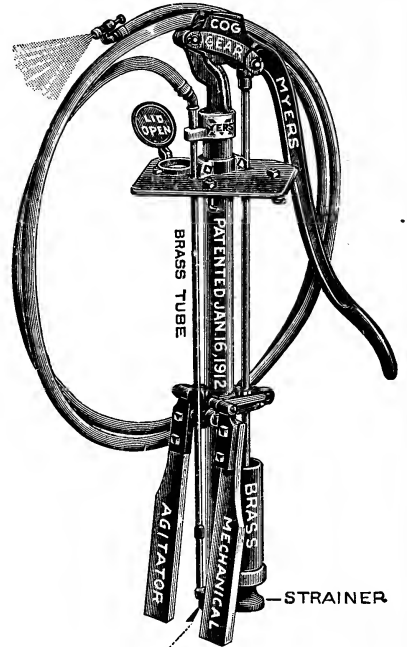
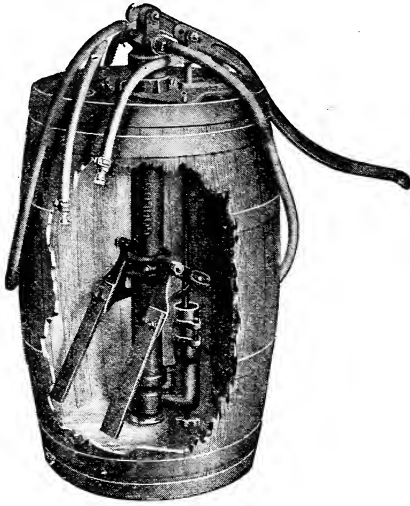
GOULD'S "POMONA" BARREL PUMP,

NO. 1100.

Outside Packed Plungers. No Leather Packings.

Is unusually powerful, fully capable of supplying two leads of hose, 15 feet each, and two angle nozzles. The working parts, including the plunger, plunger connection, gland, valve, valve seats and strainer, are of solid bronze. They are simple, accessible and easily removed. It is equipped with a long adjustable lever, producing long or short strokes by simply removing and replacing a single bolt, thus varying the pump's capacity. The agitator is simple, but very effective, operated by the same lever that works the sprayer.

Price on application.



PAT JET-AGITATOR

No. R318B

MYERS' SPRAY PUMPS.

No. R318B. A spray pump of a construction that is the very best in all its parts, being self-contained and ready for operation, when bolted to the barrel. Has bronze ball valves and brass seats; the plunger, cylinder and discharge pipe are all brass.

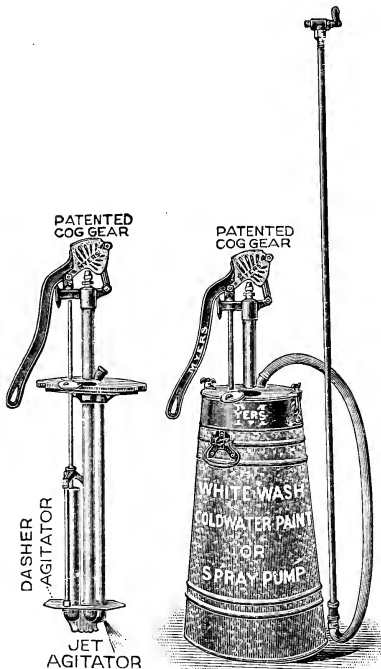
No. 329. Whitewash, Cold Water, Painting Machine and General Purpose Sprayer, with patent double agitator, a most complete and serviceable outfit. The tank is made of heavy galvanized iron with a wide bottom, so as to set steady in operation. The cover is removable, is held securely in place by two end bolts with thumb nut, one on each side, which hold the cover tight and prevent any

spilling or splashing of the liquid. Holds seven gallons and is fitted with Bordeaux nozzle, brass ball valves, and has both jet and dasher agitator.

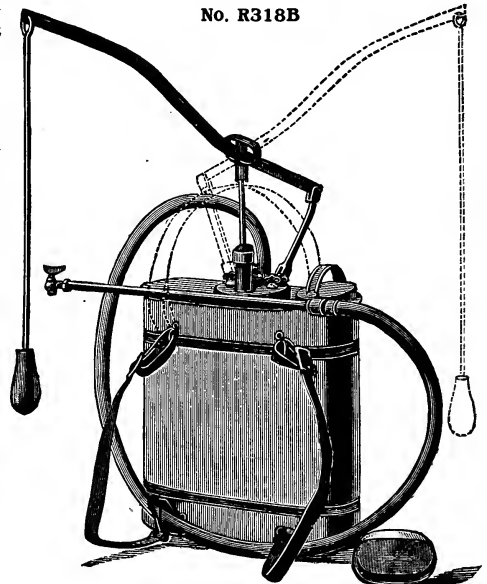
No. 330. Myers' Knapsack Spray Pump, made with galvanized iron tank, and fitted with five feet of $\frac{1}{2}$ -inch hose, pipe extension and Bordeaux or graduating Vermorel spray nozzle, which can be graduated from a fine mist spray to a solid stream, or shut off entirely.

No. 331. Same as No. 330, except made with heavy copper tank.

Price on application.



No. 329.



Myers' Knapsack Spray Pump.

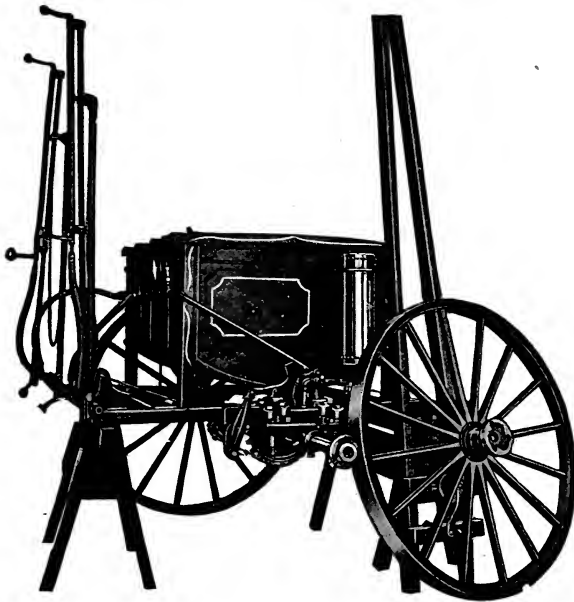
Prices subject to change without notice. (See note on page 2.)

BROWN'S AUTO-SPRAY NO. 39-A.

Two Horses.

Four or Six Row Field Sprayer.

100 Gallons.



The **AUTO-SPRAY No. 39-A** was designed after nineteen years of careful study and experience in manufacturing traction sprayers. All unnecessary parts have been eliminated. The machine is simple in design and can be operated easily by the average grower.

This machine will develop and maintain 150 lbs. pressure with eight nozzles. We don't recommend this machine to be used with more than eight nozzles.

The pump proper rests on the axle, doing away with all strain on the frame of the sprayer. The pump so located enables us to build this machine in perfect balance. The tank is also located over the axle.

Pump and air chamber are made of heavy iron castings which reduce breakage to a minimum.

This sprayer all the way through is built of nothing but the best of materials. The tank is built of Louisiana cypress. The frame is of 2" ash reinforced by heavy angle iron, which insures alignment.

The pump plungers are made of brass and are outside packed. To adjust the packing you only have to loosen or tighten two bolts.

Wheels are hickory and of Sarven pattern, 4" diameter, 3" tire.

IN DETAIL.

Axle—Cold rolled steel, $1\frac{3}{4}$ " diameter. Tracks two rows. Machine tracks 5 or 6 feet.

Pump—Double cylinder. Plunger style. Brass plungers $2\frac{1}{8}$ " diameter.

Packing—Graphite composition, packed from the outside. Adjustable without withdrawing the plunger by simply screwing two nuts over the gland.

Valves—Brass check. Broad brass seats. Set in pump manifold. Can be easily ground or replaced.

Agitator—Revolving twin paddles.

Air Chamber—Large capacity, tested under high pressure.

Nozzle—Non-Clog Junior Nozzles. Nozzles on field attachment adjustable to correspond with track.

Spray boom may be raised or lowered on the two uprights.

IRON AGE Four-Row Sprayer.

55 GALLON TANK DUPLEX PUMP.

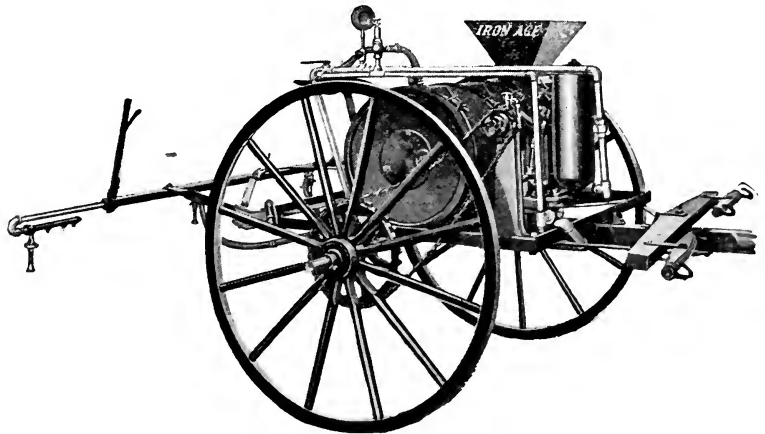
The "Iron Age" Duplex (double acting) Pump used on this No. 354-S Sprayer is new. Designed to give double the capacity of the single-action pump, it also gives smoother action, thus you can get higher pressure under the same conditions. This surplus power saves expense in the long run, quickly offsetting the slightly higher first cost. Its greater power is particularly important when the vines become very dense and heavy mixtures are used to prevent blight. This advantage will be readily appreciated by practical farmers.

This fast-working long-lived machine will deliver spray at a pressure of 150 lbs. or more.

Width of rows are adjustable to 28, 30, 33 or 36 inches.

Price on application.

Prices subject to change without notice. (See note on page 2.)



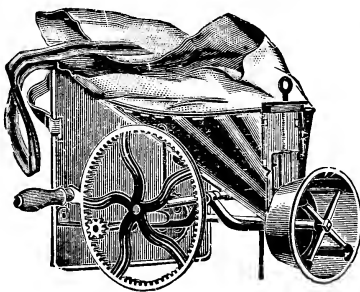


THE CAHOON BROADCAST SEED SOWER.

For Sowing Wheat,
Oats, Barley, Rye,
Buckwheat, Grass
Seed, etc.

This hand machine sows from four to eight acres per hour, at a common walking gait.

Price, \$5.50.



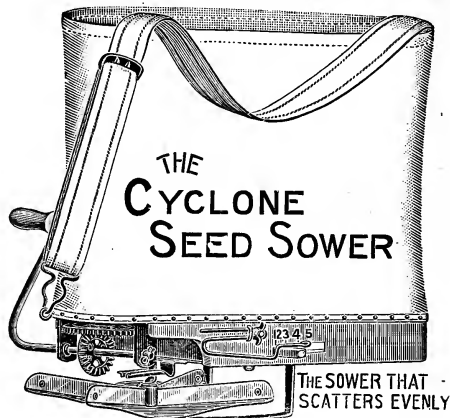
Foster (Racine) Broadcast Seeder.

(DOUBLE GEAR.)

Will sow perfectly any quantity to the acre of oats, barley, rye, buckwheat, clover, millet, timothy, Hungarian, etc. Will also sow peas, corn and fertilizers in a most satisfactory manner.

Price, \$9.00.

CYCLONE BROADCAST SEED SOWER.



This seeder is practical, neat and mechanically correct in construction. It distributes seeds evenly, has an automatic cut-off, and the iron distributing wheel gives great momentum. No machine does better work, it being a strictly high grade seeder.

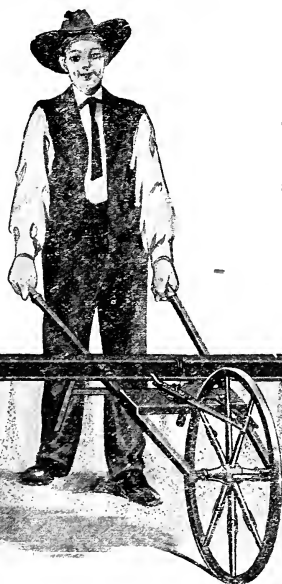
Price, \$3.00.

"NEVER MIND THE WIND—SOW ANY TIME." THOMPSON GRASS SEEDER.

This is really the greatest grass seeder made to-day. Not a toy, but a strong and durable implement specially designed and adapted to its use. It's easy—it weighs only 45 pounds. Does not throw the seed into the wind. Puts it on the ground lightly and evenly where it belongs, insuring the operator a good even catch. Strong and durable. We know of Thompson Seeders which have been in use 30 years which are thoroughly good and effective to-day.

THE "ORIGINAL" WHEELBARROW.
14 and 16 feet.

Price on application.



WHEELBARROW SEEDERS

are a most valuable implement for sowing all grass seeds broadcast. The quantity of seeds sown per acre is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. For all sections where winds prevail, there is no machine made that will equal this implement for an even, accurate job of seeding. The quantity required per acre can be instantly changed by slipping a pin from one hole to another. These seeders run light and are not complicated. Seeds can be sown mixed or separate and in any quantity desired.

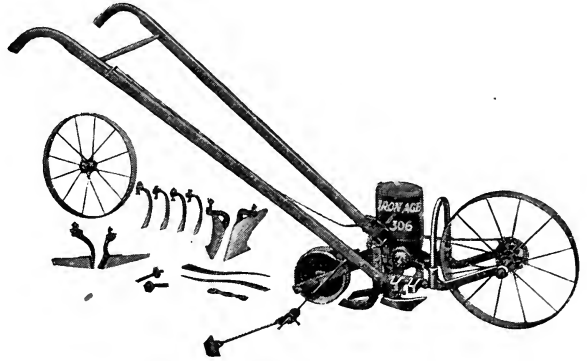
Prices subject to change without notice. (See note on page 2.)

IRON AGE GARDEN IMPLEMENTS.

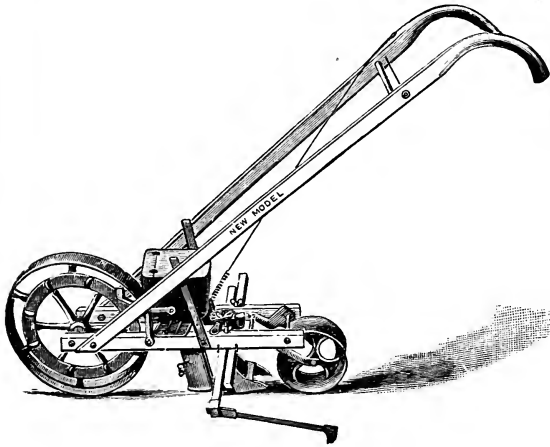
Are Strong, Accurate and Can Be Operated by Man, Woman or Child.

No. 306. Iron Age Combined Double and Single Wheel Hoe, Hill and Drill Seeder.

Ten tools in one, and each as satisfactory as a tool made for the special purpose. Places the seed in continuous rows or in hills, 4, 6, 8, 12 or 24 inches apart. Can be quickly changed to a double or single wheel hoe, cultivator, rake or plow.



No. 306.



New Model Seed Drill.

No. 315. Iron Age Combined Single Wheel Hoe, Hill and Drill Seeder.

Same as the No. 306 above excepting it has only the single wheel.

New Model Seed Drill.

This drill has been in use many years, and is well known to give perfect satisfaction. It has a large, broad tired wheel, perfect and reliable index, a cut-off to stop the flow of seed when desired, and is very valuable and complete.

No. 12. Iron Age Wheel Plow and Cultivator.

Remarkable for its exceeding lightness, combined with great strength, the low price and variety of work it will accomplish. Will do all the work of a small garden, as plowing, hoeing, raking and cultivating, and is especially suitable for those desiring such a variety of tools for a small amount.



No. 12.

Price on application.

Prices subject to change without notice. (See note on page 2.)

IRON AGE GARDEN IMPLEMENTS—Continued.

No. 301. Iron Age Double and Single Wheel Hoe.

Can be quickly changed to a double or single wheel hoe, cultivator, plow or rake, as a double wheel can be used astride the row or as a single wheel between the rows. A drill seeder or hill and drill seeder attachment can be added at any time.



No. 301.



No. 19C.

No. 19C. Iron Age Wheel Plow and Cultivator.

Has a higher wheel than any previously offered, it being 24 inches high, with 1-inch tires and very strongly made. The frame is steel throughout, which insures durability and lightness.

Price on these machines and on the full Iron Age line on application.

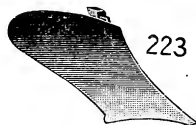
THE TRUE TEMPER GENEVA.

QUICK-ADJUSTABLE CULTIVATOR NO. G2

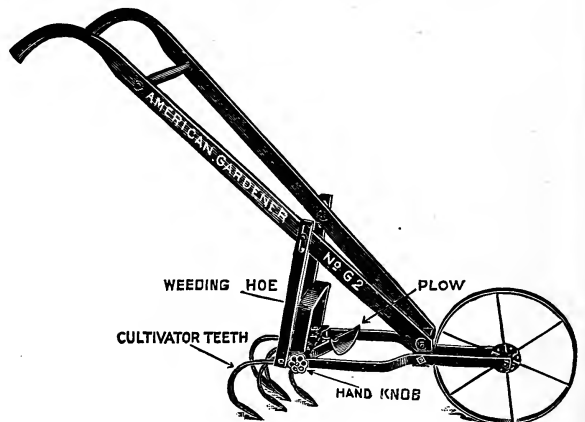
is recognized everywhere as the only real quick-adjustable cultivator on the market. It has a weeding hoe, a plow and five cultivator teeth, all permanently attached to a revolving steel plate. Any of these tools may be securely locked into working position by a few turns of the hand wheel—a time and labor saver.

Machine has steel forged tools, well selected oak handles, with comfortable handle grips. It has 14-inch steel wheel and is finished in colors, then varnished.

Plow and furrow opener comes as extra attachment.



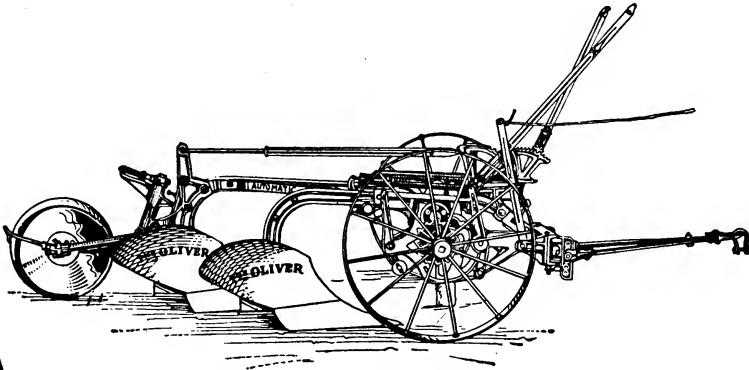
223



Price on application.

Prices subject to change without notice. (See note on page 2.)

THE OLIVER NOS. 78 AND 79 TRACTOR PLOWS.



Oliver No. 78, Two Bottom.

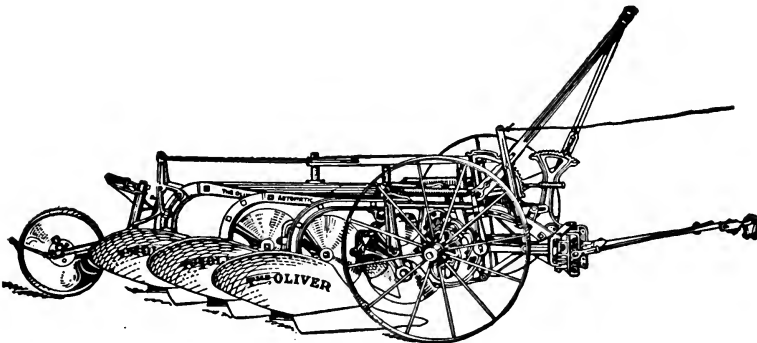
Plowing is the hardest work connected with farming. It is also the most expensive single item in preparing the seed bed.

With an Oliver Tractor Plow and any standard light tractor, the farmer can turn from six to nine acres of land per day. This can be done in the spring when the team is soft or in the fall when the heat is intense. Not only can plowing be done at the proper season, but also at a big saving in cost. As the Oliver Tractor Plow is a one-man outfit, the labor of one man is sufficient to turn nearly five times as much land in a day as he can with a walking plow.

The Oliver Nos. 78 and 79 plows are strong and durable. They are equipped with a positive power lift which permits raising and lowering the plow from the tractor seat. They can be fitted with bottoms adapted to all mouldboard plowing conditions. They are equipped with Oliver quick detachable shares, which permits share changes without wrench. Oliver combined rolling coulters and jointers bury all weeds and trash, and leave no air spaces in the seed bed.

SPECIFICATIONS.

Name.	No. Bottom.	Width Cut.	Weight.
Oliver No. 78	2	10 inches	870 pounds
" 78	2	12 "	895 "
" 78	2	14 "	900 "
" 78	3	12 "	1105 "
" 78	3	14 "	1150 "
" 79	4	12 "	1420 "
" 79	4	14 "	1445 "



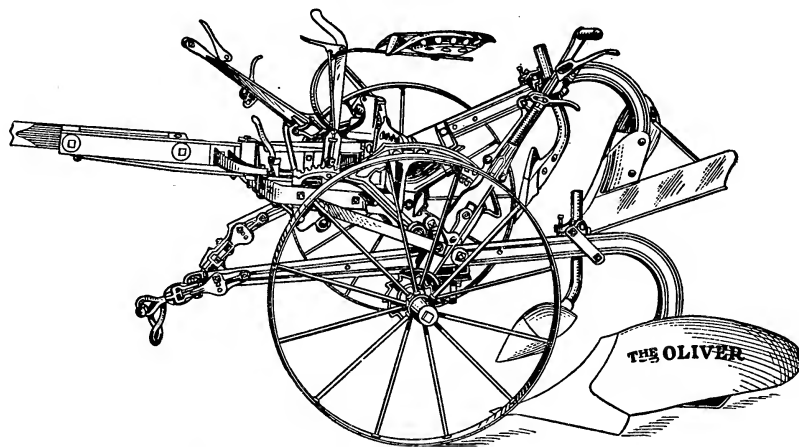
Oliver No. 78, Three Bottom.

Price on application.

Prices subject to change without notice. (See note on page 2.)

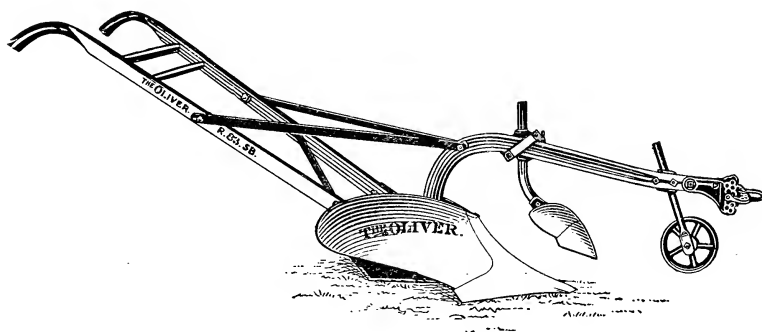
OLIVER PLOWS.

REVERSIBLE SULKY PLOW.



There are certain conditions in which it is necessary to be able to plow back and forth one side of the field, using alternately a right and left hand bottom. The Oliver No. 23-A Reversible Sulky provides farmers with a means of doing this kind of work with minimum effort. By means of a horse lift, operated by a foot trip, the operator can keep his eyes on his team and his hands on the reins. Adjustable ball block adapts the No. 23-A Sulky for three different sizes of bottoms. Through this adjustment, it is possible to keep the plow in direct line of draft, eliminating side strain on the beams. A guiding lever permits perfect line of draft when the change of bottom is made. The Oliver No. 23-A Sulky is furnished with steel mouldboard.

NOS. 82, 83 AND 84.



This series of plows is designed for those sections where a general purpose plow is needed to turn sod, raw land, clay and sand, and gravelly, stony soil. The long, curved mouldboard turns the deep furrow slice completely over, covering trash. The plows are steady running, light in draft, easily handled and heavily braced. This series of Oliver plows is made with steel mouldboards.

No. 82. A light two-horse plow. Capacity, 6 x 12 inches.

No. 83. A medium two-horse plow. Capacity, 7 x 13 inches.

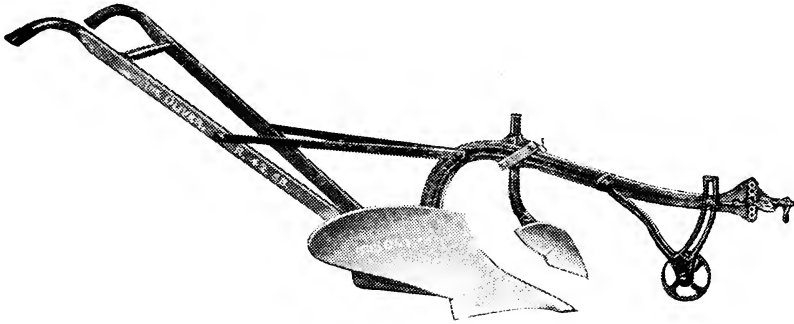
No. 84. A large two-horse or medium three-horse plow. Capacity, 8 x 15 inches.

Price on application.

Prices subject to change without notice. (See note on page 2.)

OLIVER PLOWS.

NOS. 42 AND 43 STEEL BEAM PLOWS.



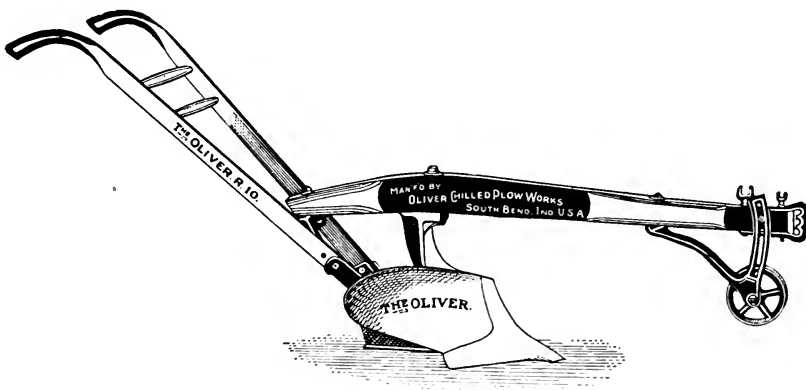
The turning and pulverizing shape of the mouldboard at the top and its bluntness in front make this an easy scouring plow, and it can be used to good advantage on level or rolling land, either sod or stubble. The beams are steel, with high arch for trashy clearance. The renewable landside shoe and chilled share make a plow that always runs with the proper suck and wing, no matter how long it may be in use.

No. 42. Medium two-horse plow. Capacity, 7 1-2 inches deep, 13 inches wide.

No. 43. Large two-horse plow. Capacity, 8 1-2 inches deep, 15 inches wide.

OLIVER CHILLED ONE HORSE PLOW.

MADE WITH BOTH STEEL OR WOOD BEAM.



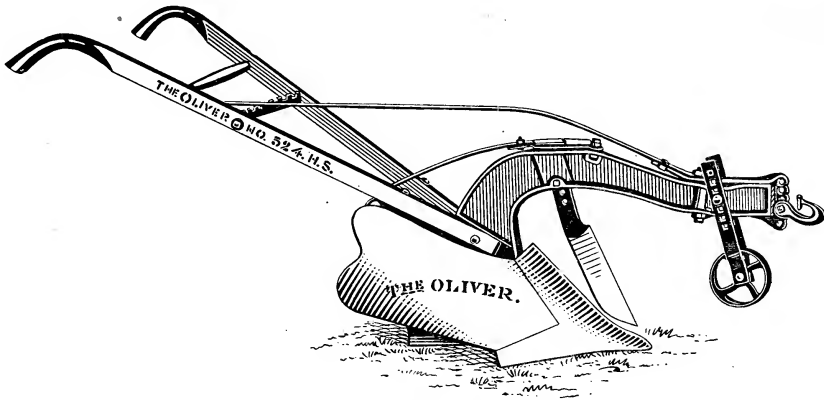
NO. 10.

Furnished complete with wheel and coulter. Its lightness of draft and strong and durable construction make it a most satisfactory plow for small gardens and for furrowing.

Price on application.

Prices subject to change without notice. (See note on page 2.)

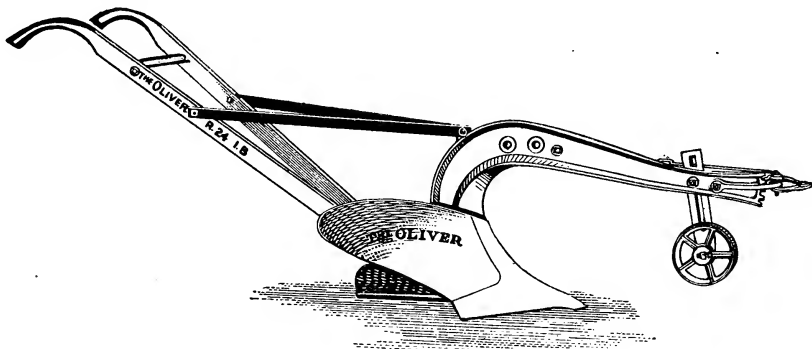
OLIVER HILLSIDE PLOWS.



No. 524 Hillside Plow.

The Oliver series of hillside walking plows is built for use in hilly country and other places where it is desirable to plow back and forth across the same side of the field, without laying out lands. The Oliver No. 524, because of its lightness of draft, strong construction, and adaptability to both hillside and level field work, has found great favor with the farmer. The No. 524 is equipped with a chilled mouldboard and share. Its automatic hanging cutter is always in line with the cutting edge and gives satisfaction. A steel lever shifting clevis regulates the width of furrow. Shifting of the bottom is made easy by a conveniently placed foot lever. The Oliver No. 524 is regularly equipped with a gauge wheel. It has a capacity of 8 inches deep by 15 inches wide.

OLIVER ROAD AND GRADING PLOWS.



The "Good Roads" movement which is now nation-wide is causing a great demand for road plows. For certain types of road work there is no better implement than the Oliver No. 25 Road and Grading Plow. This plow will break the hardest roads, as it is sturdily built. It can be used with horses or light tractors. The chilled mouldboard is long and deep for breaking the soil into lumps. The chilled cutter share is of a special deep suck type to insure penetration. Hanging coulter, jointer, gauge wheel or gauge share furnished extra on order. The capacity of the Oliver No. 24 is 7 inches deep by 14 inches wide.

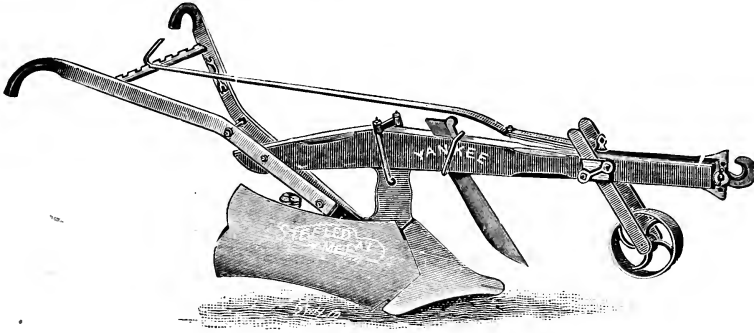
Price on application.

Prices subject to change without notice. (See note on page 2.)

THE YANKEE SWIVEL PLOW,

With Patent Steel Shifting Lever and Clevis.

IN SIZES FOR ONE, TWO OR THREE HORSES.

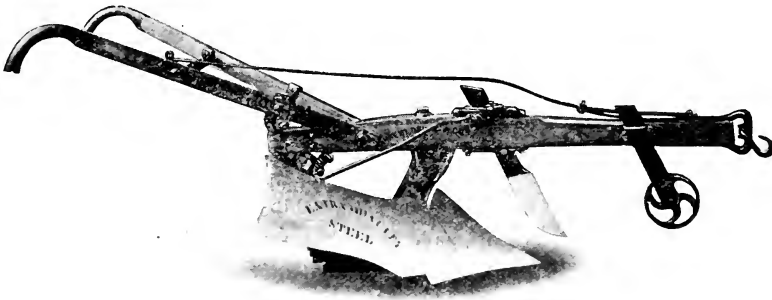


The special distinctive feature in the Yankee is the patented steel shifting lever and clevis, which, as shown in the above cut, consists of a steel lever attached to the clevis, held stationary and firmly in position by iron notches between the handles. When this lever is moved by the plowman, either to the right or left, which can be done instantly without stopping the team, the width of the furrow is changed. The excellence of such an arrangement will be seen by all, especially in view of the fact that heretofore reversible plows, as usually made, have no means of adjustment of any kind, and have frequently been condemned in consequence. Not only is this attachment so easy of operation that a child can manage it, but being of simple construction it will never get out of order. These plows are made from patent steeled metal, with beams and handles of best Eastern white oak.

The H series of Yankee Plows shown on this page has patent spring foot latch, an invaluable improvement, as, being operated entirely by the foot, the plow is ready for work as soon as reversed, which is done without taking the hands from the handles, or stopping the team. It is simple, strong and durable, and does not get out of order.

Price on application.

The Sargent No. 76 Plow.



This series has proved very popular in New England. They are light weight, of good capacity and handle easily.

THESE PLOWS ARE MADE WITH STEEL MOULDBOARD.

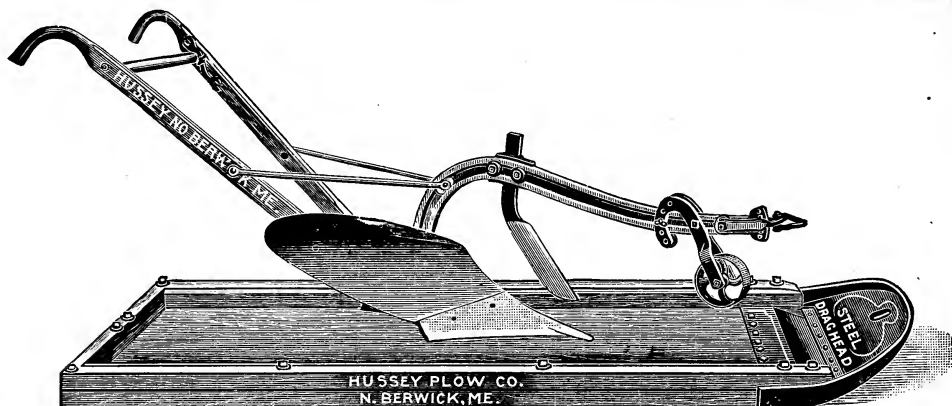
76A MEDIUM TWO-HORSE, CAST SHARE, STEEL BOARD.

76B LIGHT TWO-HORSE, CAST SHARE, STEEL BOARD

Price mailed on application.

Prices subject to change without notice. (See note on page 2.)

HUSSEY PLOWS.



These plows are very strongly built, have the regular "Hussey" shaped mouldboard, which is so much liked by New England farmers, are made of the best materials throughout, are easily held, and are as nearly complete and satisfactory in every respect as the most critical can ask.

No. 23. MEDIUM OR LIGHT TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.

Cuts from 4 inches to 7 inches deep, 11 inches to 13 inches wide.
Weighs, complete, 120 lbs.

No. 26. LARGE TWO-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.

Cuts from 6 inches to 8 inches deep, 13 inches to 16 inches wide.
Weighs, complete, 128 lbs.

No. 28. LARGE THREE-HORSE PLOW. Steel Mouldboard, "Hard Metal" Point.

Cuts from 7 inches to 9 inches deep, 14 inches to 18 inches wide.
Especially adapted for breaking up new land.
Weighs, complete, 162 lbs.

No. 100. (Wood Beam.) ONE-HORSE PLOW.

Cuts from 5 inches to 6 inches deep, 10 inches wide.
Weighs, complete, 66 lbs.

No. 102. (Wood Beam.) LIGHT TWO-HORSE PLOW.

Cuts from 5 inches to 7 inches deep, 12 inches wide.
Weighs, complete, 82 lbs.

No. 104. MEDIUM TWO-HORSE PLOW.

Cuts from 7 inches to 8 inches deep, 16 inches wide.
Weighs, complete, 111 lbs.

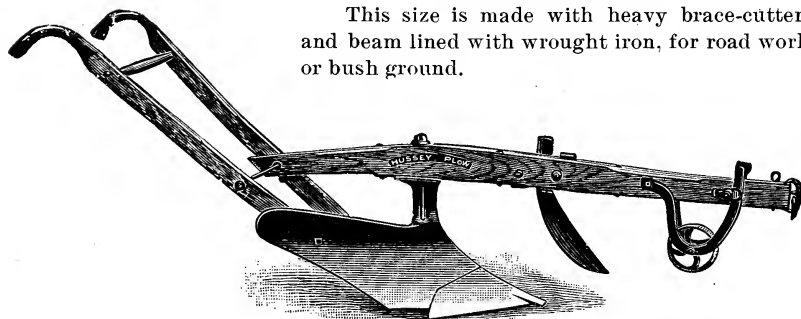
No. 106. LARGE TWO-HORSE PLOW.

Cuts from 7 inches to 9 inches deep, 16 inches wide.
Weighs, complete, 124 lbs.

No. 108. (Wood Beam.) HEAVY ROAD OR BUSH GROUND PLOW.

Cuts from 8 inches to 10 inches deep, 18 inches to 20 inches wide.
Weighs, complete, 190 lbs.

This size is made with heavy brace-cutter, and beam lined with wrought iron, for road work or bush ground.

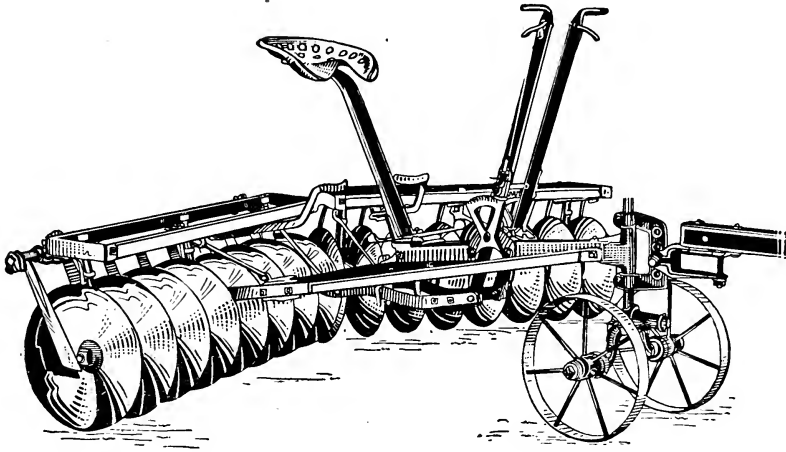


WOOD BEAM HARD METAL PLOW.

Price
on
application.

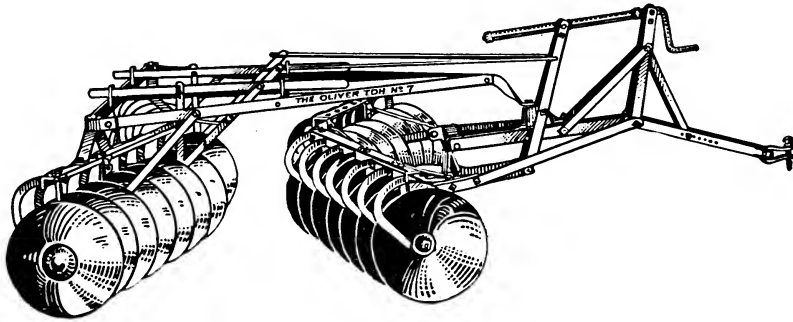
Prices subject to change without notice. (See note on page 2.)

OLIVER DISC HARROW.



On the Oliver "A" series disc harrow, the gangs can be set at any angle for proper penetration of different soils. Just the right degree of disc curvature enables the discs to pulverize the soil to the desired depth. High quality spring steel scrapers are controlled by foot levers. Slat and control levers are so placed that the driver can be comfortable and at the same time adjust the gangs easily and conveniently. Frame, constructed from angle steel, is sufficiently large to make it strong and durable. The Oliver "A" Harrow is furnished in sizes cutting six feet wide with 16 or 18 inch discs.

OLIVER TRACTOR DISC HARROW.

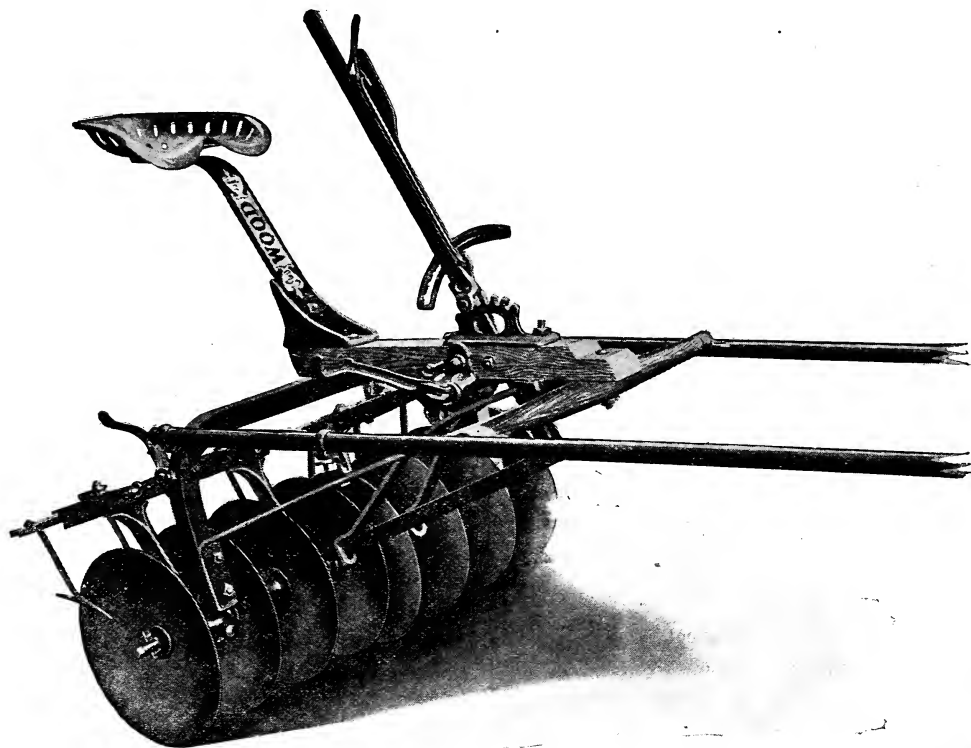


No farm equipment is complete without a good disc harrow. The best plowing only partially prepares an ideal seed bed. The Oliver TDH is specially designed for use with any standard light tractor. Its construction permits all four gangs to be set at more or less angle from the tractor seat without the use of a lever and without backing the harrow. All changes are made quickly and easily by means of a screw crank adjusting device accessible from the tractor seat. The gang connection pivot, being higher than point of pitch, converts the forward pull of the tractor into a downward pull on the gangs. This feature, together with the fact that the gangs can be set at a wide angle, assures ready penetration. The Oliver TDH Harrow can be furnished in 5, 6 and 7 foot sizes with either 16 or 18 inch discs. Weight pan furnished as an extra.

Price on application.

Prices subject to change without notice. (See note on page 2.)

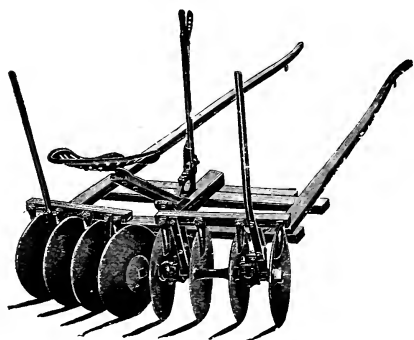
THE WALTER A. WOOD ONE-HORSE DISC HARROW.



In addition to being constructed of the best material and in the most workmanlike manner, the Wood Disc Harrow is the only one possessing perfectly loose, flexible, ball-bearing gangs controlled by adjustable spring pressure. This pressure is regulated by means of a foot lever to correspond with the work that is being done. The results of this feature are: Saving of discs, reduction of draft and great improvement in cultivation. Among the many one-horse harrows in the market, the Wood stands out because of its **spring flexible ball-bearing features.**

Price on application.

ONE-HORSE YANKEE PULVERIZER.



The demand for a one-horse disc harrow with lever, giving greater freedom to the user, has caused us to make this late addition to our large line of harrows.

As will be noted by the cut, this harrow is equipped with the buffer feature made popular in the Yankee series, as preventing the excessive wear on the boxes and hard draft found on other patterns.

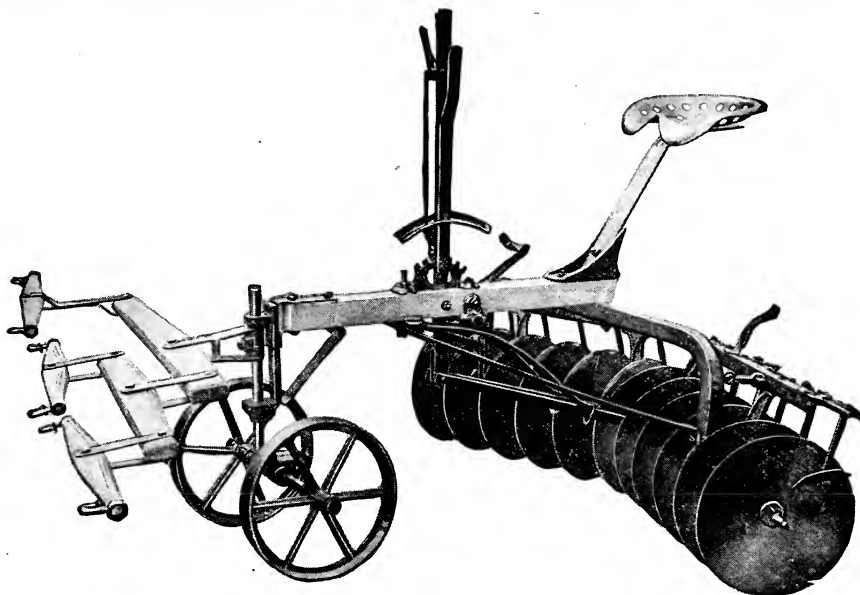
The scraper attachment is operated by levers. The seat standard is made with a steel spring, which insures easy riding. The same draft boxes used in other disc harrows, and which have proven excellently adapted for the work, will be found in this harrow.

No. 1. Has eight 16-inch plain steel discs, which cut four feet wide

Price mailed on application.

Prices subject to change without notice. (See note on page 2.)

THE WALTER A. WOOD DISC HARROW WITH POLE TRUCK.



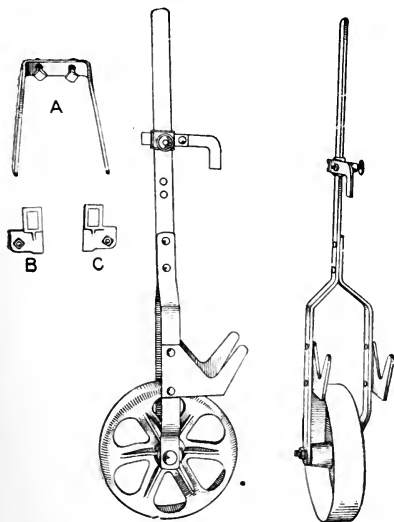
The Wood Disc Harrow is one of the most efficient tools. It cuts and covers the weeds and stubble; cuts the sod without pulling it up.

The value of fall plowing in many sections is being recognized more and more. The disc harrow for spring use is, therefore, becoming more and more valuable.

Even when plowing in the spring the disc harrow will prove valuable. By cutting up trash first, when the plow comes along the ground settles down more quickly than if the trash were turned under whole. Of course after spring plowing the disc harrow will be needed to get the seed bed into shape as quickly as possible.

**Simplicity, Strength, Ease and Quickness of Attachment, Perfect Work
ARE COMBINED IN**

THE NEW IMPROVED TRANSPORT ATTACHMENT FOR DISC HARROWS.



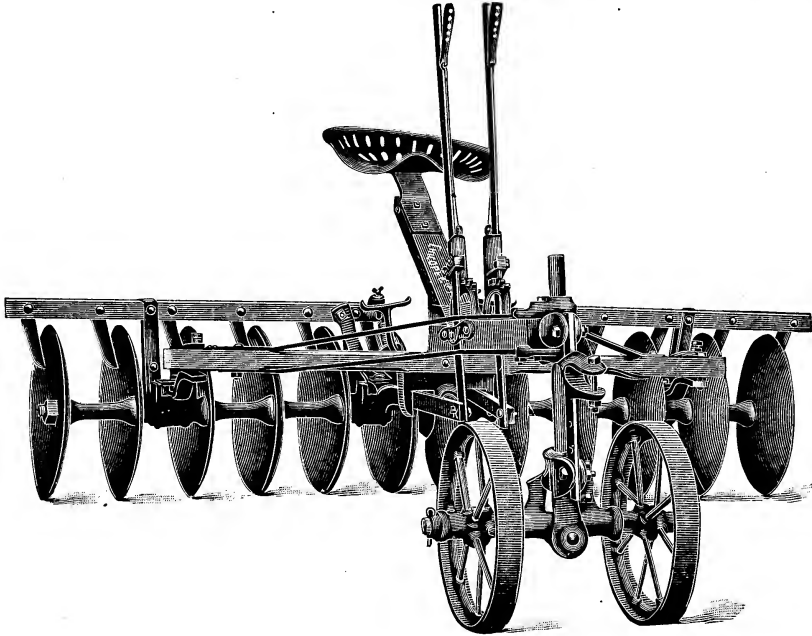
The cut illustrates in detail the new, improved transport for disc harrows. This attachment is simple, possesses great strength, and can be attached or detached in a few seconds.

This new transport attachment for disc harrows has been thoroughly tested in actual working conditions. It has proved to be a most desirable device both as regards the ease and quickness with which it may be attached and the service it gives in the transportation of the harrow. To place transport in position simply pass the handles between the discs from the front of harrow so that the hooked supports fit around axle. Raise handles vertically and allow hooks on upper ends of handles to slip over harrow frame. To remove attachment is equally simple, quick and easy.

Price on application.

Prices subject to change without notice. (See note on page 2.)

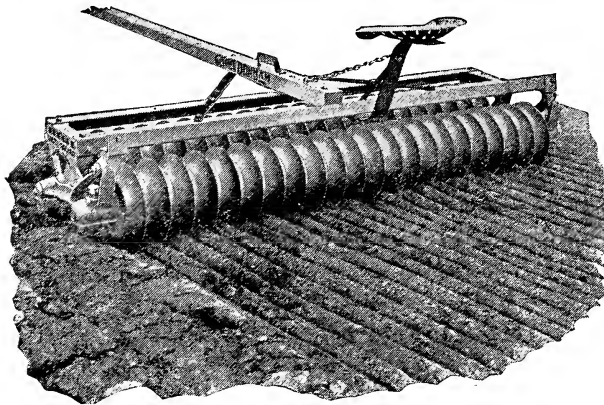
CHICOPEE DOUBLE LEVER DISC HARROW.



A disc harrow giving greater freedom to the user in making a wider range of adjustment possible on rolling or hillside land, is found in the "Chicopee." As will be noted by the cut, this harrow is equipped with the buffer feature, preventing the excessive wear on the boxes and hard draft. This is an important feature which should not be overlooked when buying a new harrow. The scraper attachment is operated by the feet.

Price on application.

DO NOT CONFUSE THIS CULTI-PACKER WITH THE ORDINARY LAND ROLLER. IT IS A PULVERIZER, PACKER AND CULTIVATOR.



Culti-Packer breaks the crust, cultivates oats and barley, stops soil blowing, crushes lumps, fills air spaces, conserves moisture, creates a mulch and speeds germination.

The Culti-Packer is not recommended to replace any tillage tool you ordinarily use. It finishes what the other seed bed makers begin. Under the old way a field was plowed, disked and smoothed with a peg-tooth harrow, but *you* know of many, many times when after those operations were complete the field was far from smooth. There were great lumps of dirt still cluttering up the surface. Hard clods were scattered about, and under the hot sun these became solid and utterly devoid of moisture. It is not the best kind of a seed bed to plant grain in, because the drill furrow openers will not penetrate evenly—some seed is scattered about on the surface to be eaten by the birds and the resulting stand is considerably

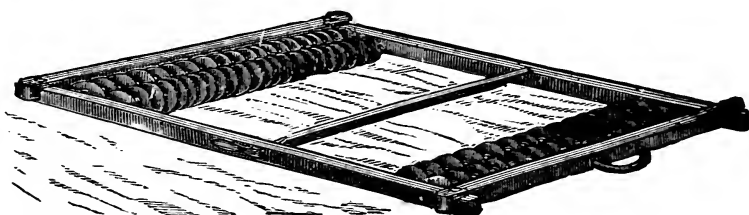
under normal. You must have a good seed bed.

Beneath the surface of a newly plowed field there are innumerable air spaces where one furrow strip overlaps the other. Unless the disc harrow is used both before and after plowing, these air spaces are never completely filled in, but remain as pockets to wither the plant roots and retard the upward flow of sub-soil moisture. For many years farmers have realized the need of a tool to crush lumps and press out the concealed air spaces. The Culti-Packer has been developed to meet this need.

Price on application.

Prices subject to change without notice. (See note on page 2.)

THE MEEKER SMOOTHING HARROW.



Perfect Harrow and a Perfect Land Roller Combined.

This harrow has become a great favorite among all classes of farmers and market gardeners in all parts of the country.

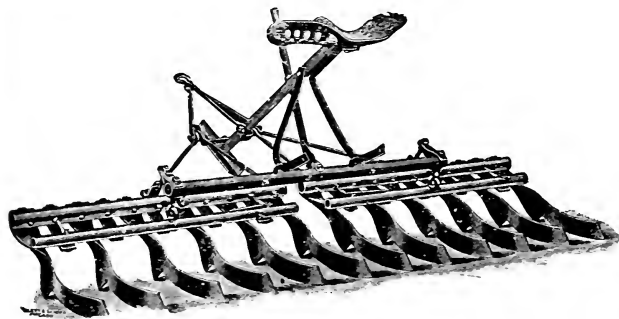
It has two sets (four) of rollers containing 58 steel discs.

These discs grind all lumps and save the work of raking, and also mash small stone below the surface better than any field roller, leaving the land smooth and level.

The discs of one roller work between those of the other, preventing clogging in damp soil. The board in the center is set at an angle, is adjusted up or down and serves as a leveler.

Price on application.

ACME PULVERIZING HARROW, CLOD CRUSHER AND LEVELER.



The coulters on the "ACME" Pulverizing Harrow work down between the furrow slices, filling the air spaces with finely pulverized soil. The lumps and clods are entirely broken up and pulverized. Trash or stubble that has been plowed under is not dragged to the surface, but is left beneath the surface, where it rots rapidly and adds humus to the soil. The seed bed prepared by "ACME" Pulverizing Harrows is well compacted so that the seed will germinate

rapidly; the surface is finely mulched so that all moisture is conserved. The user of the "ACME" Harrow will find that, although the season be dry, the seed bed prepared with an "ACME" Harrow will attract and retain sufficient moisture to carry it through to a successful crop. All parts of the harrow are steel and practically indestructible. The coulters are made of a special steel and are oil hardened. The frame of the harrow will last indefinitely, and after the coulters have been worn out new ones can be procured, which will make the harrow just as good as when it originally left the factory. We carry in stock "ACME" Harrows made for one and two horses.

Price, One-Horse Size, \$12.00; Two-Horse Size, \$15.00.

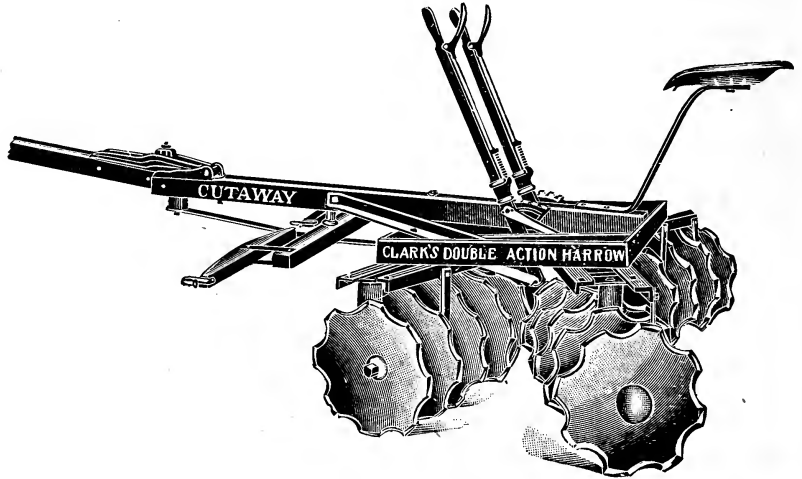
Prices subject to change without notice. (See note on page 2.)

CLARK'S "CUTAWAY" TOOLS.

Clark's Double Action "Cutaway" Harrow.

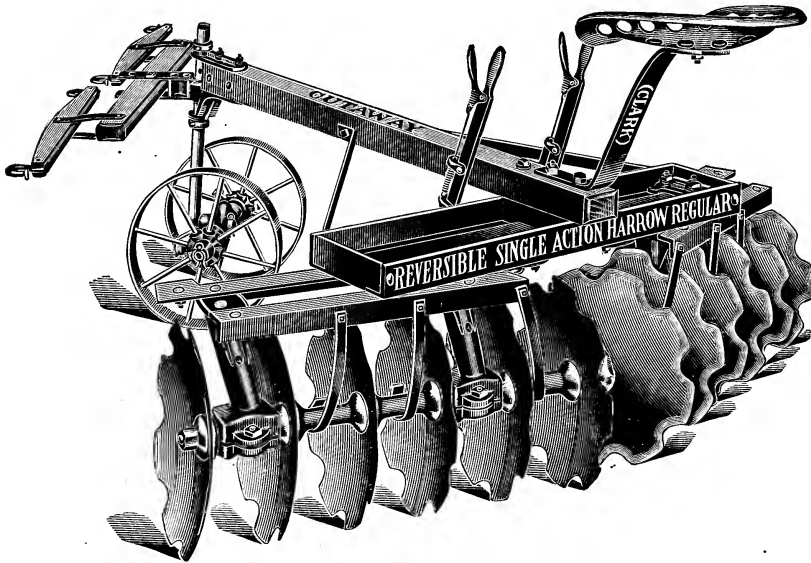
These machines have four gangs of discs, two in front and two in the rear. The front gangs loosen and break up the dirt and throw the dirt out; the rear gangs throw the dirt in. All four gangs are carried by a main frame that gives a very strong, unyielding connection between them. The rear discs are placed so as to track between the front discs and the main frame holds the rear discs to their work, keeping them from dodging to either side and holding them in the ground, no matter how hard the land is. Any trash passing between the front discs is cut up and turned under by the rear discs, where it will turn into plant food. Having a four-point bearing on the ground these machines run steady and true in the line of draft. The draft of these machines is very light, as the rear discs work in loose soil and consequently are drawn easily.

The whole machine, with the exception of the pole, is made of either iron or steel. The main frame and the gang frame side pieces are made of heavy angle iron. The strain of the gangs is taken up by angle iron bars, one above and one below the inner end of the gang frame. Both side pieces on each gang extend out between these bars. Heavy pipe standards are used, with the oil hole for the bearing at the top of the standard.



Clark's "Cutaway" Single Action Harrow.

Regular with Tongue Truck and Extension Head.



Why has this harrow won the support of practically every farmer who owns one? Because, first of all, it does the work; it is one of the most effective tillers ever put in the field. Second, its durability is almost unlimited. Third, it is convenient to handle and easy on the team. To reverse this harrow, you simply disconnect the lever links from the gang frames and swing the gangs around on the king bolts until what were formerly the outer discs become the inner discs, and reconnect the links. In this latter position the discs will throw the soil inwardly. Like those on all other "Cutaway" implements, the discs on this harrow are cutlery steel discs, forged sharp. This feature partly accounts for the remarkably

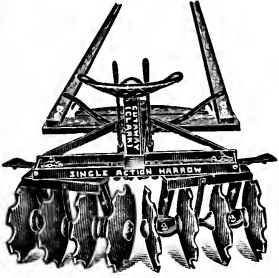
long service always given by "Cutaway" disc implements. Forging compacts the molecules in the steel, making the disc much tougher than those sharpened in any other manner. It makes them retain a sharp edge long after ordinary discs are well worn away.

Price on application.

Prices subject to change without notice. (See note on page 2.)

CLARK'S "CUTAWAY" TOOLS—Continued.

CLARK'S "CUTAWAY" ONE-HORSE HARROW.

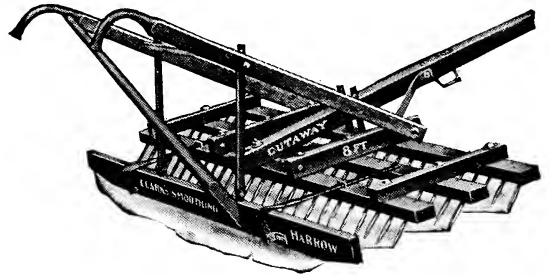


It is made for the express purpose of meeting the needs of the man who has only one horse. By means of the "Cutaway" Harrow intensive tillage is made as economical and as practical for the man with a small outfit as for the man with large equipment. This machine is equipped with 16-inch Clark forged edge discs. The journals are hard wood.

Price on application.

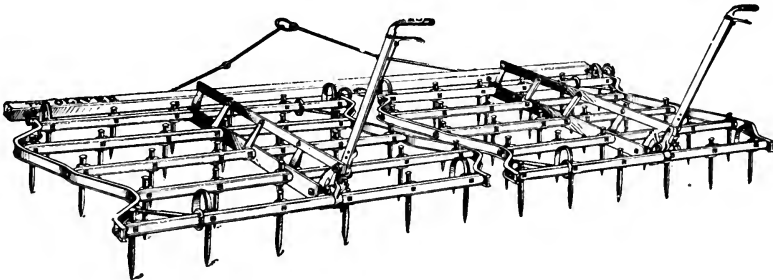
CLARK'S "CUTAWAY" SMOOTHING HARROW.

While a large per cent. of the users of "Cutaway" harrows find their machines leave such a smooth, finely pulverized seed bed that a smoothing harrow is not exactly necessary, we recommend this smoother to follow the "Cutaway" harrows. We know that the last degree of perfection in a seed bed pays, and that the "Cutaway" Smoothing Harrow will secure for you that perfection. It combines the merits of the spike-tooth harrow and the plank drag. The teeth dig, tear and pulverize, and the plank levels, smooths and packs. Observe the handle, which gives the driver perfect control over the plank and makes it easy for him to carry large or small quantities of soil into the hollows. Also note the steel spring by which the plank is attached.



Price on application.

OLIVER SPIKE-TOOTH HARROW.

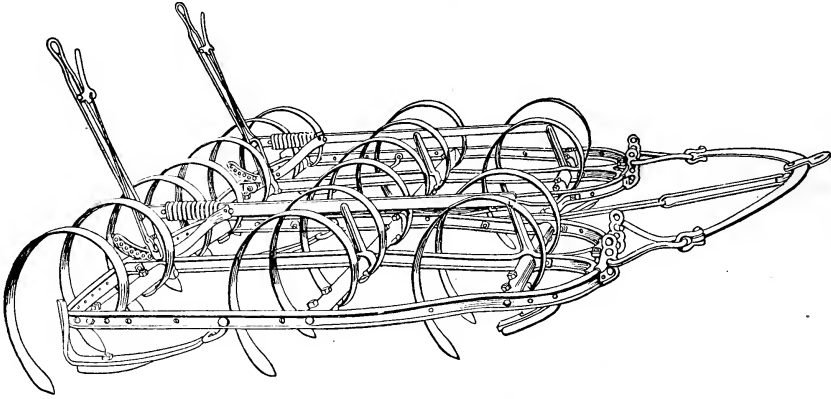


The Oliver Spike-Tooth Harrows are equipped with side latch levers that make it easy to control the harrow and provide a grip for lifting the sections to clear the teeth of trash.

Price on application.

Prices subject to change without notice. (See note on page 2.)

WALTER A. WOOD SPRING TOOTH HARROW.



The use of the spring tooth harrow is increasing as fast as farmers find that it is a most valuable tool for loosening up the ground in the preparation of a seed bed. It is especially valuable in working soil that has been packed, as it leaves no ridges and requires less work later with a smoothing harrow.

Price on application.

ADRIANCE SPRING TOOTH HARROW.

The **Adriance** Spring Tooth Harrow has been a continual success from the day it was first put on the market. For the man who wishes the best, it is a highly satisfactory tool.

Adriance Frame Bars are of heavy channel steel, two inches wide, stiff and substantial. The frames are carried high above the ground, affording sufficient clearance and avoiding obstructions.

Tooth Bars. The tooth bars are heavy steel tubing, one and five-eighths inches in diameter and proportionate weight. Large malleable trunnions are riveted in the tooth bars and pass through the frame, being secured laterally by a washer and cotter. The tooth bars turn freely in the frame bars, yet hold the frame firmly together.

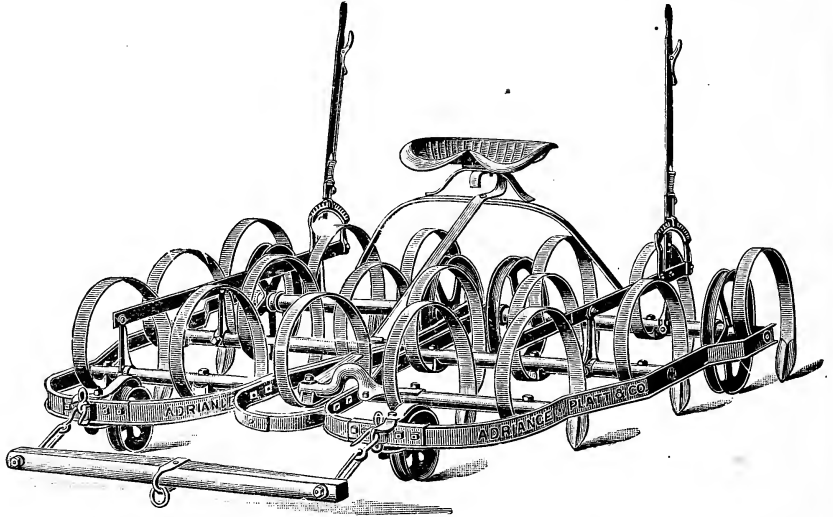
The Spring Teeth. The **Adriance** teeth are spring steel, hardened in oil, and every one is tested before leaving the factory. The greatest precaution is taken to prevent fault, and the hard usage they will stand in actual work proves the **Adriance** are the best. They are one and three-quarters inches wide, and to do the heavy work expected they cannot be lighter and make a successful tool.

The Tooth Fastenings are the simplest and best in use. As the tooth is shaped to wrap closely around its bar, this fastening, one bolt and reinforcing washer, holds it securely.

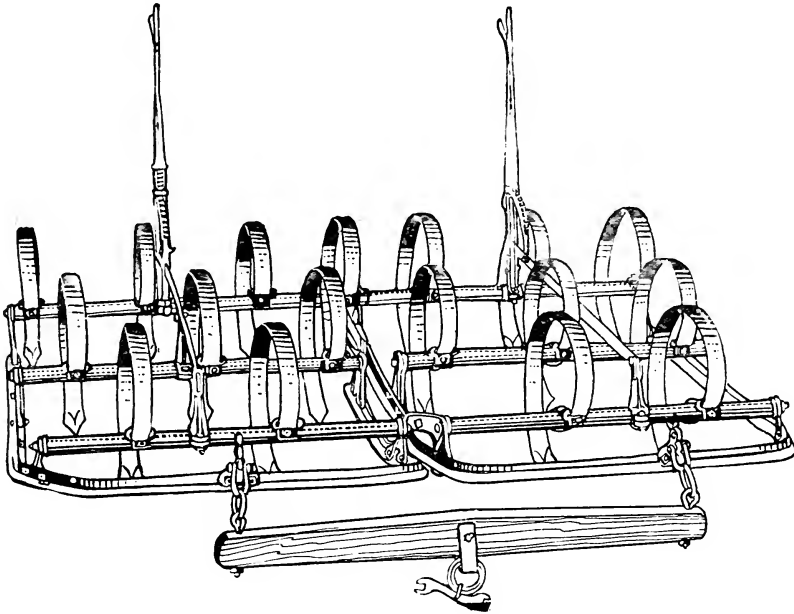
Arrangement of Teeth. An improvement peculiar to the **Adriance** harrow is a tooth between the sections at the front of the harrow; it prevents stones or large lumps from passing between the sections and clogging the harrow. The teeth will not trail; each keeps its line and does its work. The two-section harrow is very flexible and follows uneven ground closely, leaving its entire width of evenly cultivated ground.

Price on application.

Prices subject to change without notice. (See note on page 2.)

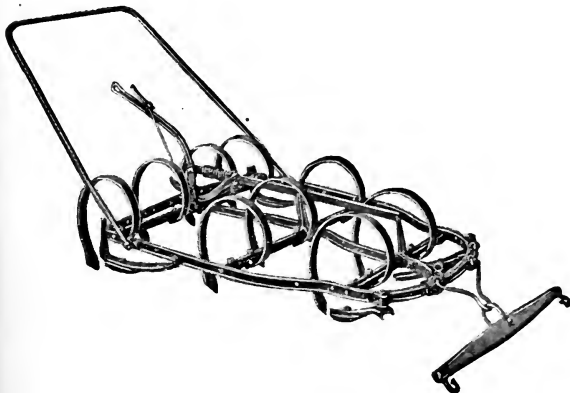


THE OLIVER LEVER HARROW.



Oliver spring tooth harrows are made in sizes one section, nine teeth, and two sections, fifteen or seventeen teeth. They are made with channel bar frames with runners.

The sides of the frame form runners. The inside runners are cut off halfway to allow ample clearance for trash. Reversible steel shoes, 1-4" thick, bolted to the bottom of runners saves wear on frame. The frames of the channel bar harrows are made of high carbon T stock. Design of tooth clip prevents teeth slipping or becoming loose. The tooth clip gives any amount of adjustment desired, and allows a large part of the tooth to be used. A lever on each section also permits quick positive adjustment of the spring teeth.



WALTER A. WOOD One-Horse Spring Tooth Harrow.

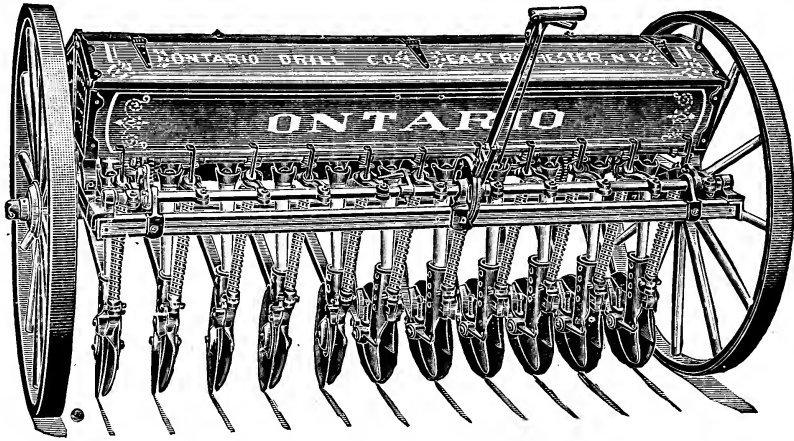
A very popular harrow, used extensively for orchards, gardens and small farms. Made entirely of steel and malleable iron. Is controlled by the handles, as easily as a cultivator. Frame is made of angle steel, and is sloped at the front to avoid obstructions. Has renewable steel shoes.

Price on application.

Prices subject to change without notice. (See note on page 2.)

ONTARIO COMBINED SINGLE DISC DRILL.

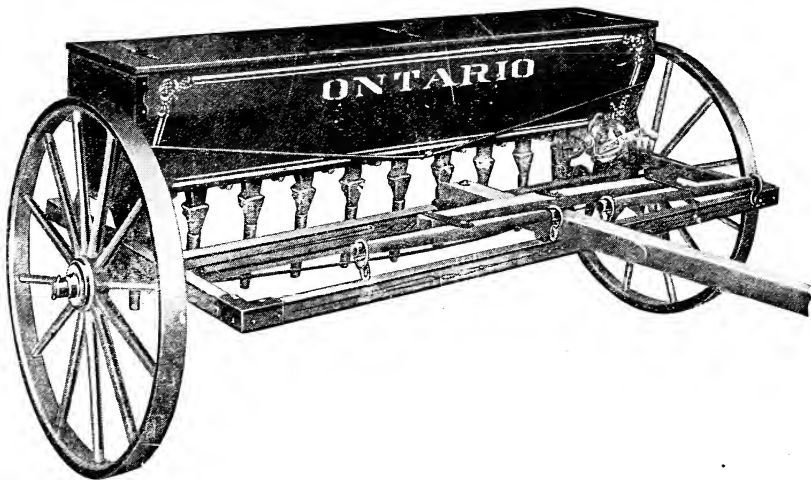
(For Sowing Grass Seed, Grain and Fertilizer.)



The most popular and best adapted style of drill for the New England States. In simplicity of construction, accuracy of operation and lightness of draft, it excels any machine in the world of similar construction and recognized merit.

ONTARIO FERTILIZER, BROADCASTER AND ROWER.

Style B.



It is the only positive force-feed machine of its kind made in which the conductors have a lateral adjustment.

Its use is not confined to plaster, bone dust and other mealy fertilizers, for it handles lime and all commercial fertilizers, and is the best device known for handling those of home manufacture.

Sows broadcast or in any width of rows from eight inches up to five feet, in quantities ranging from two hundred to two thousand pounds per acre.

Is equipped with a land measure that does not get out of order. It accurately measures the acres and fractions of acres sown, and is easily set at the nothing mark.

Price on application.

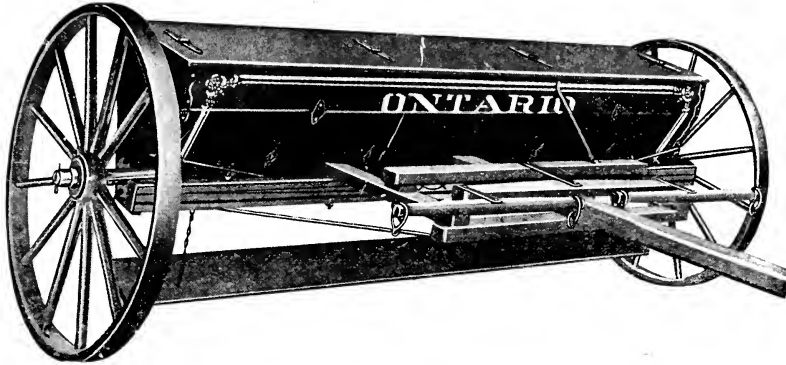
Prices subject to change without notice. (See note on page 2.)

The Ontario Fertilizer and Lime Distributor.

Style H.

SIMPLE, STRONG, DURABLE.

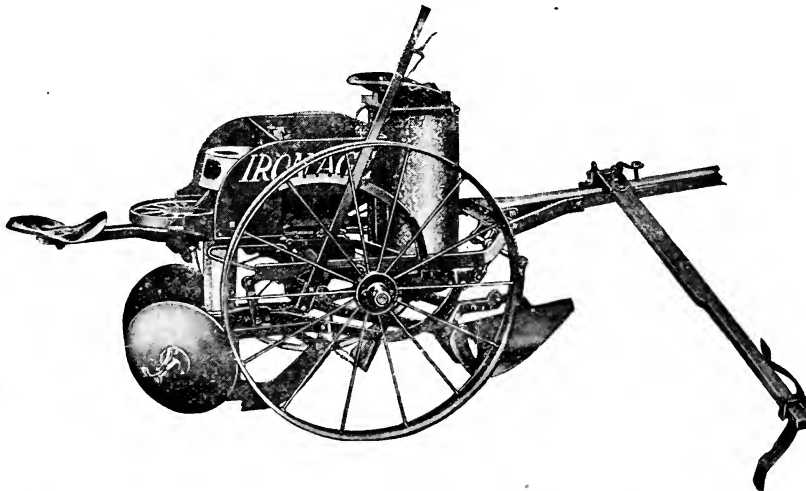
SOWS BROADCAST.



Built to meet the demand for a simple, practical and comparatively inexpensive machine with which to distribute lime and fertilizer. The quality of the material used, the workmanship, the design and the finish are all first class. The parts are few, and are made not only with a view to efficiency, but for strength and durability. The mechanism is of the simplest form and easily understood. It is an honest, durable and practical machine, with exceptional value for the cost. Has proved a useful, handy machine for sowing dry fertilizers, such as plaster, ashes, lime, bone dust, cotton seed meal, salt, etc.

Price on application.

THE "IRON AGE" (Improved Robbins) POTATO PLANTER.



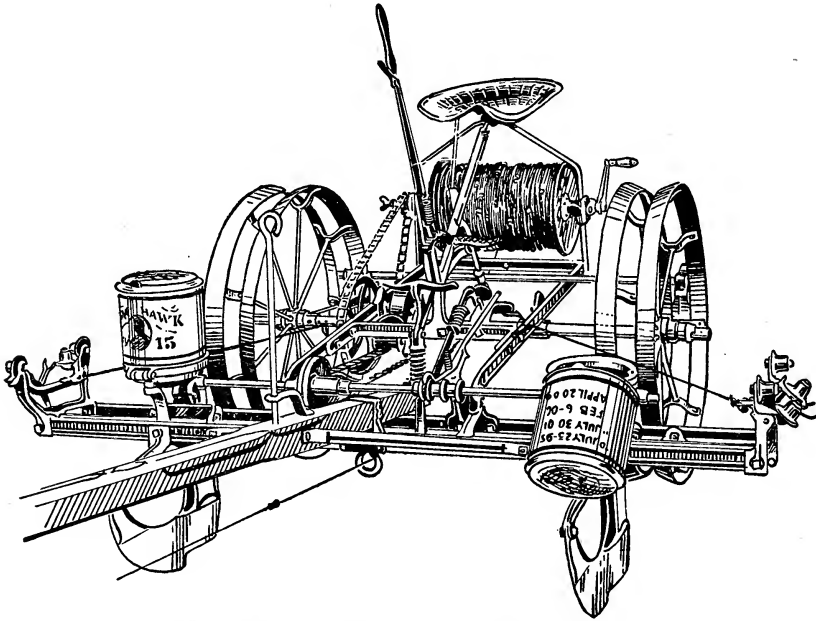
No. 400R. Potato Planter with Fertilizer Distributor (Plow with Shield). With Fertilizer Attachment.

This planter is one of the most thoroughly constructed machines offered to the farming public. It is carefully made of the very best materials and consequently is strong, durable and thoroughly practical. It does not injure the seed, although it is all handled automatically. It places every seed piece exactly as you want it. It sows fertilizer at the same time, but none of it where it touches the seed. It is light weight, light draft, strong, compact and is easy on the horses. With the boy on the rear seat you can be absolutely sure that a seed piece is in every place and one only.

Price on application.

Prices subject to change without notice. (See note on page 2.)

BLACK HAWK CHECK-ROW CORN PLANTER.



No. 15. With Fertilizer Attachment.

Accuracy in depositing seed is the first essential in a planter. On account of its edge drop system of seed selection and other desirable features, the Black Hawk No. 15, two-row planter has become known among farmers as a most accurate machine. Always one, but never more than one, kernel in each seed cell explains the remarkably accurate drop. Seed is selected by thickness instead of width or length.

Another valuable feature of the No. 15 planter is the variable drop. By merely shifting a lever with hand or foot, without stopping the team, more or less seed will be planted. This efficient feature allows the farmer to deposit seed according to the richness of the soil and thereby obtain the greatest possible yield. This can be done as often as desired in the same row, whether set for drilling or hilling. Additional variation is provided by the use of different sprockets and different plates.

The Black Hawk No. 15 Planter is a general purpose check-row planter and drill. It can be adjusted to plant rows from 36 inches to 44 inches apart. When specified, the following widths can be furnished, 36 inches to 48 inches, 28 inches to 44 inches, or 28 inches to 48 inches.

Regular equipment consists of anchor stake, 80 rods of Barlow check wire, and three sets of seed plates, disc marker, automatic marker, quick, detachable runners or stub runners, and open or concave wheels are furnished. The No. 15 can be furnished without the check-row attachment when desired to be used for drilling only.

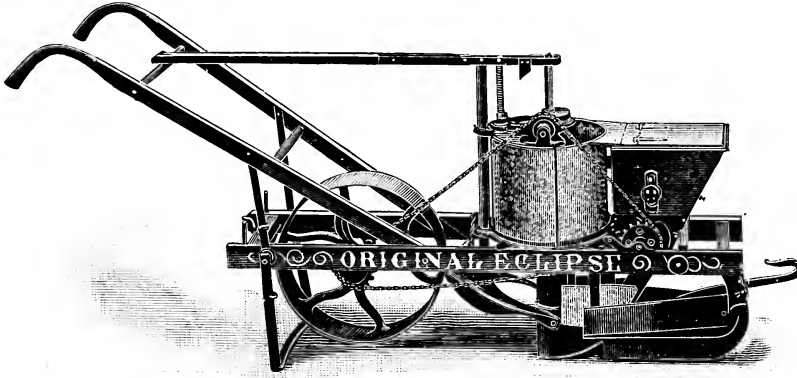
Fertilizer attachment is supplied as an extra. It is operated by a chain drive shaft and is easily thrown in or out of gear. Attachment distributes any quantity from a very small amount to 700 lbs. per acre, dropping it directly in the furrow but not in contact with the seed. The spouts will not buckle when the runners are raised.

Prices quoted on application.

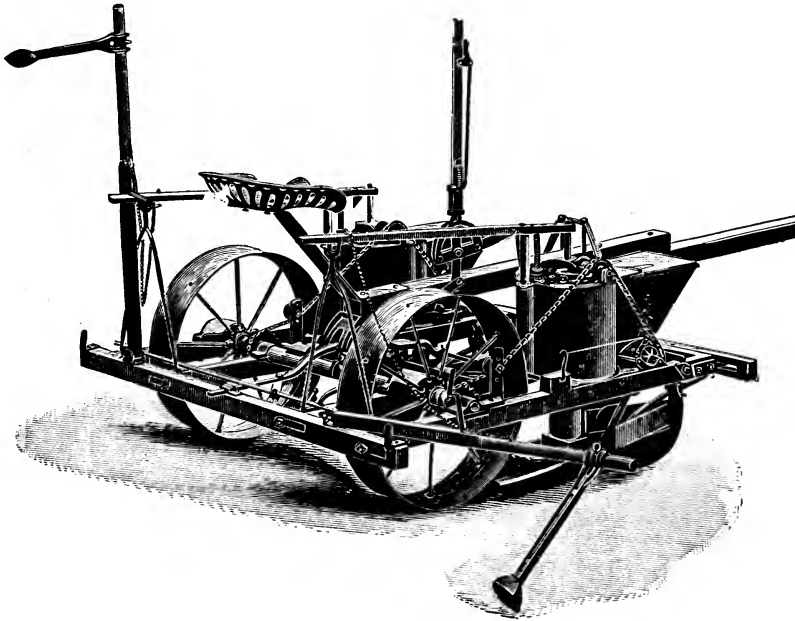
Prices subject to change without notice. (See note on page 2.)

ECLIPSE CORN PLANTER And Fertilizer Distributor.

For Planting Field or Ensilage Corn, Beans or Peas, in Hills or Drills.



Eclipse Double Row Corn Planter.



Will distribute from 50 to 600 pounds of fertilizer to the acre. Can be adjusted to make the rows 36, 38, 40 and 42 inches apart.

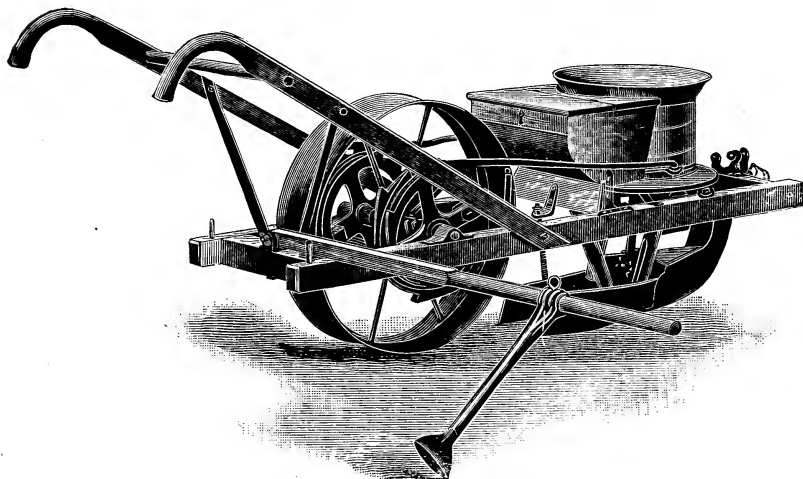
Plows can be adjusted to plant corn from one to four inches deep, as desired.

Price quoted on application.

Prices subject to change without notice. (See note on page 2.)

THE KING OF THE CORN FIELD CORN PLANTER AND FERTILIZER DISTRIBUTOR.

Plants Corn, Beans, Peas, Beets and Other Seeds of Like Size.



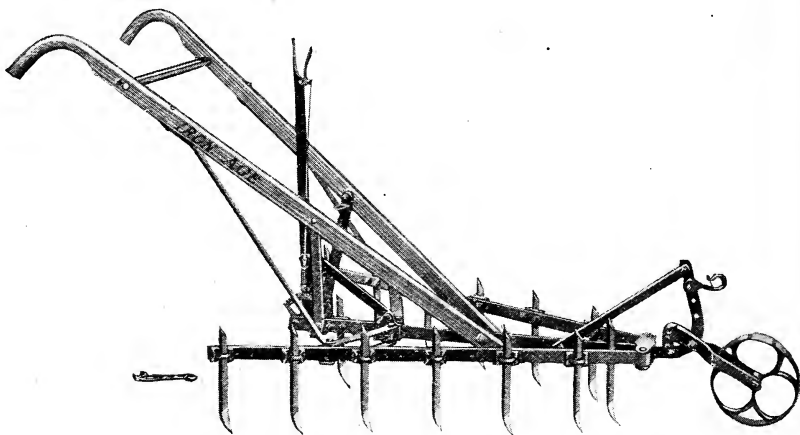
This planter is perfectly adapted to every requirement; durable and simple in construction, not liable to get out of order, and is arranged to drop any desired quantity of seed or fertilizer at a time, at equal and various distances apart, in hills or drills of uniform depth. The seed-dropping device is positive; never misses or skips a hill.

Price on application.

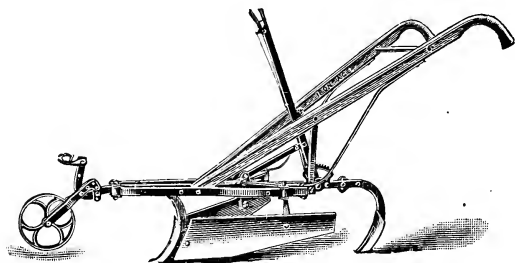
DIAMOND TOOTH CULTIVATOR.

As plainly shown in cut, the teeth are diamond shaped with a small cultivator tooth forged on one end—steel, of course. For very close work, every other tooth can be quickly removed. Cultivating width when equipped with lever expander, 34 inches.

Price on application.



DIXIE CULTIVATOR, WITH HILLING ATTACHMENT.



The hilling attachment is applied by simply removing four standards and placing the standard of the hiller on the middle bar and attaching the short standards of the blades to the side bars. This attachment is used in cases where higher ridging is desired than what can be accomplished with the regular horse hoe blades.

Price on application.

Prices subject to change without notice. (See note on page 2.)

"NEW MODEL CENTENNIAL."

No. 8. An extra implement at small additional expense.

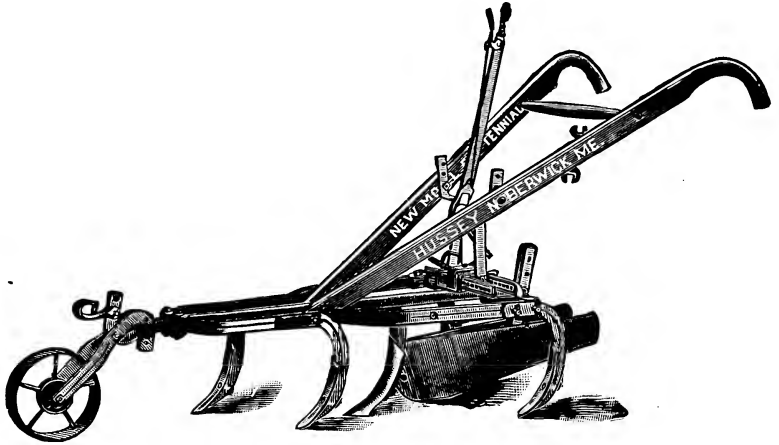
The regular 5-tooth Horse Hoe, Cultivator and Coverer combined (No. 1), or an 8-tooth Pulverizer, on same frame.

The long frame of the "New Model Centennial" allows us to add the extra teeth without danger of clogging.

No. 8
has eight 1-inch
points, long wings
and lever.

No. 1
has five 3-inch
points, long wings
and lever.

Back of Improved
Point, 1 inch wide.



No. 1. New Model Cultivator.

The "New Model Centennial" Horse Hoe, Cultivator and Coverer combined has long been recognized as an implement of unusual merit. The simplicity and fewness of parts required for changing it over to suit the various kinds of work to which it is adapted, and its unique and very efficient expansion lever, are among the reasons for its popularity.

An important improvement has recently been made in the one-inch reversible points for this cultivator.

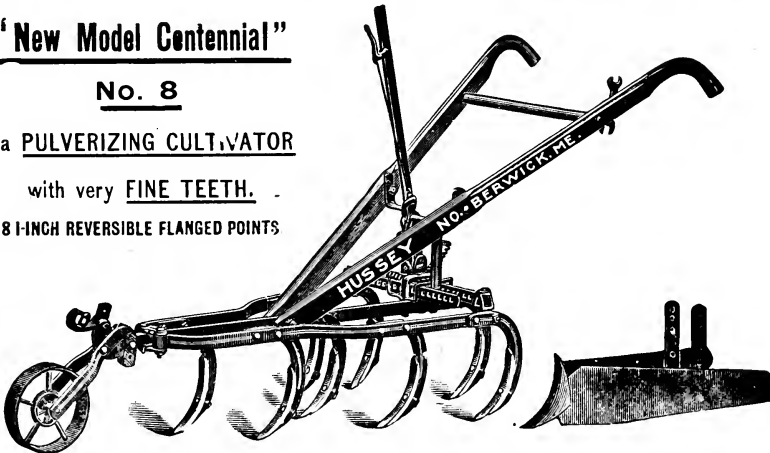
"New Model Centennial"

No. 8

As a PULVERIZING CULTIVATOR

with very FINE TEETH.

HAS 8 1-INCH REVERSIBLE FLANGED POINTS



No. 8 as a PULVERIZING CULTIVATOR with FURROWING WINGS DETACHED.

The illustration at the left shows the improved point with the strengthening flanges. It will be readily seen that the flanged point is not only much stronger than the old style, but the flanges prevent the point from swinging around on the standard in rough and rocky land.

Equipped with eight of these narrow flanged points, the No. 8 is one of the very best pulverizing cultivators on the market.

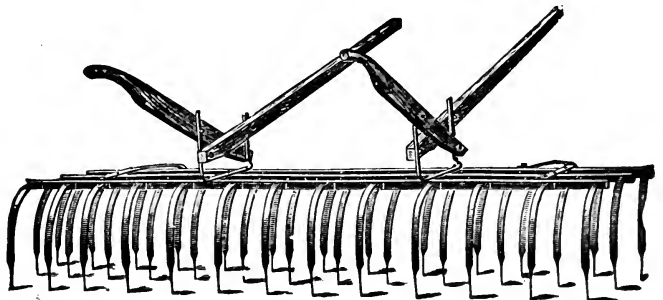
Price on application.

THE "K. & W." WEEDER.

The attention of farmers is called to the great saving effected in time and labor by using the "K. & W." Weeder.

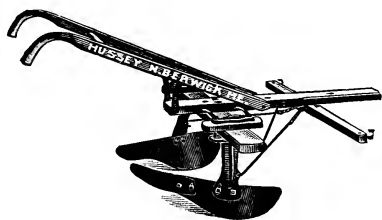
One of the best machines for level cultivation, will not injure the roots of growing crops, but kills out the weeds, and leaves a fine mulch on the surface of the ground.

Price on application.



Prices subject to change without notice. (See note on page 2)

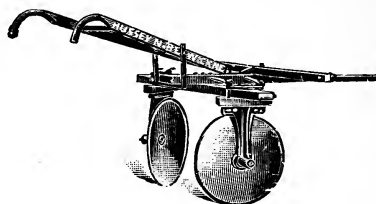
IMPROVED POTATO HOE, Furrower, Marker and Coverer.



The Improved Potato Hoe is, as its name indicates, especially adapted for hilling potatoes, banking celery, and also as a coverer. It is much used as a "marker" for different crops, making the rows parallel and equally distant.

"K. & W."

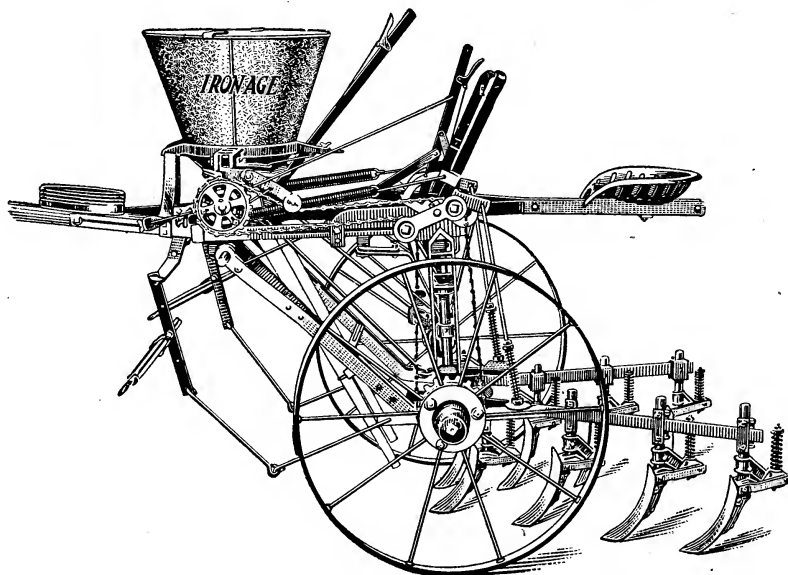
IMPROVED 20-INCH DISC POTATO HOE.



Considered by many farmers the best hoe made for hilling and covering. A distinct departure from the styles commonly in use, the large discs doing smooth and perfect work.

Price on application.

NO. 78 IRON AGE RIDING CULTIVATOR AND FERTILIZER ATTACHMENT COMBINED.



NO. 78 RIDING CULTIVATOR EQUIPPED WITH NO. 578 FERTILIZER ATTACHMENT.

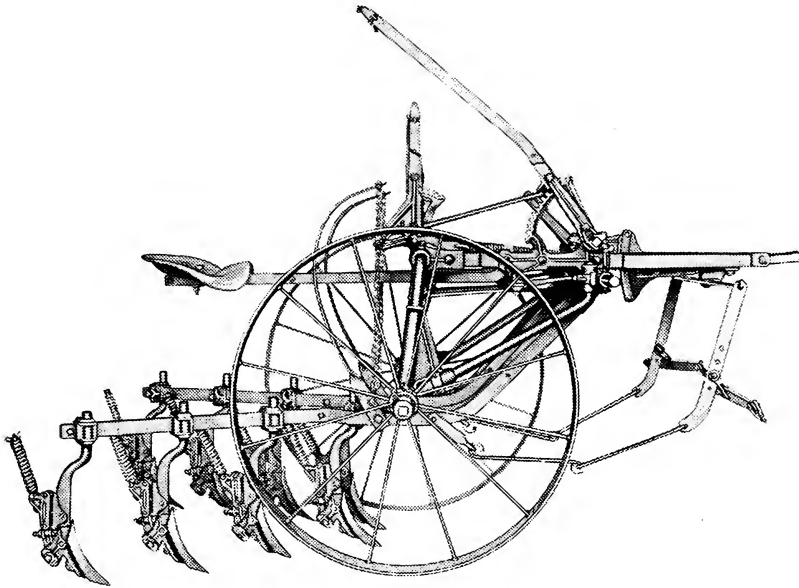
A new and important attachment that combines fertilization and cultivation in your fields. Scattering fertilizer all over the field before planting is very wasteful, and fertilizer applied directly to the hill is likely to burn the plant if it comes in contact. With this attachment a quick-acting fertilizer can be thoroughly mixed with the moist soil underneath when the crop is first cultivated. This correct application enables the plant to absorb the fertilizer much more easily. The hopper on this attachment holds about 80 pounds of fertilizer or about 50 pounds of cotton seed meal. The feed is practically the same as that on the Iron Age Potato Planter, which has served efficiently and dependably for many years. The feed spouts are adjustable, and can be regulated to suit the width of rows.

Cultivator and attachment furnished complete or separately as desired. Cultivator furnished with eight trip spring hoes and shields. Disc attachment extra.

Price on application.

Prices subject to change without notice. (See note on page 2.)

THE OLIVER NO. 30 CULTIVATOR.



The Oliver No. 30 Cultivator is an exceedingly valuable implement for use in truck or other farming where it is necessary to cultivate in extremely narrow rows or to quickly vary the width between the gangs. The ease with which it can be adjusted, so that the operator can go from one field where rows are one width into another plot where the rows are either wider or narrower, is an outstanding feature of this cultivator. The wheels of the Oliver No. 30 Cultivator can be narrowed down to thirty-one inches, so that it will cultivate rows from twenty-eight inches to four feet apart.

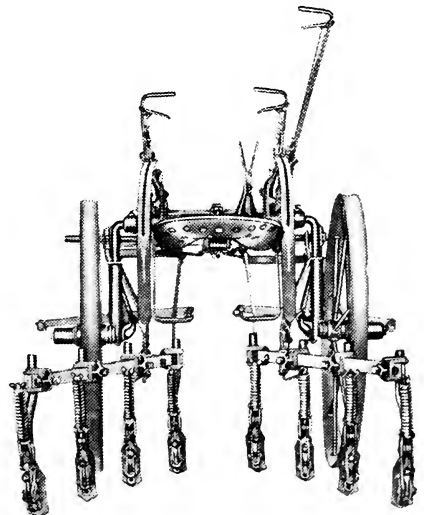
The levers are easy to operate and are within easy reach from the seat.

The pivot axle construction used on this cultivator makes it extremely desirable in cultivating hill-sides or working in crooked rows where it is necessary to dodge plants.

Strong pressure springs insure the penetration of the gang even under difficult conditions.

The Oliver No. 30 Cultivator is well balanced, so that there is no tongue whip either when the gangs are in or out of the ground.

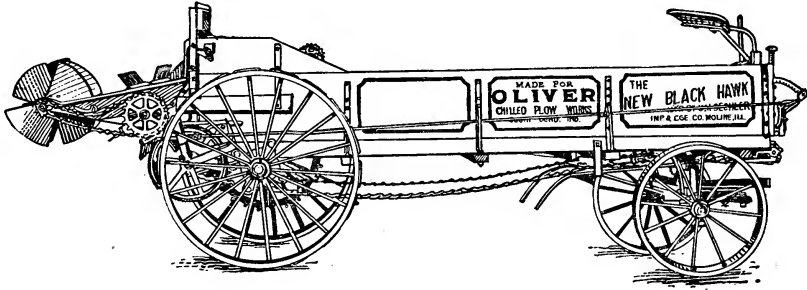
This cultivator is regularly furnished with eight shovel gangs, either spring trip or pin break. An eight shovel spring tooth gang or tobacco hoeing attachment can be furnished for this cultivator on order.



Price on application.

Prices subject to change without notice. (See note on page 2.)

OLIVER BLACK HAWK SPREADER.



The question of final profit to the owner was the concern of the manufacturer in designing the New Black Hawk Manure Spreader. No expense was spared to include in this spreader those features which, through operation, pay the purchaser the highest returns on the money invested.

It was the aim of the manufacturer to build a spreader which would thoroughly pulverize the manure and spread it evenly in small or large quantities. The more efficient spreading in this way produces additional value from manure every year.

Thorough, even spreading, requires a constant even flow of manure from the spreader. In the New Black Hawk Spreader, the large, eight bar, steel beater throws the manure from the load in a regular flow. The bottom is solid and does not revolve. A simply constructed unloading conveyor moves the load to the beater.

A wide spread attachment thoroughly pulverizes the manure and scatters it evenly. The efficiency of this wide spread device is due to the position and shape of the heavy steel blades. A simple ratchet adjustment varies the amount of the flows. This is regulated by a lever placed convenient to the operator. The flow can be controlled from a light top dressing for grain to a very heavy spread for run-down land.

Weight of the load is evenly distributed on all four wheels. The entire wheel base is only 92 inches. The front axle is of the automobile type. Turns to right or left are made without altering position of the axle. This makes possible short turns and eliminates whipping of the tongue.

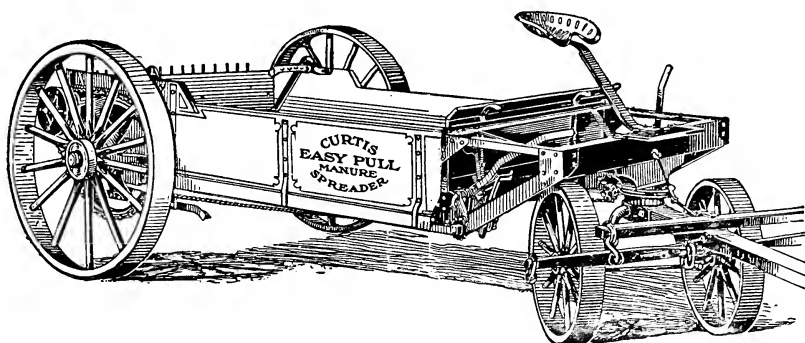
New Black Hawk Spreaders are made in sizes of 40 to 70 bushel capacity. Side boards, furnished as extras, increase load from 10 to 15 bushels. Straw spreading attachment can also be furnished as extra on order.

Price on application.

Prices subject to change without notice. (See note on page 2.)

The "Curtis Easy Pull" Manure Spreader.

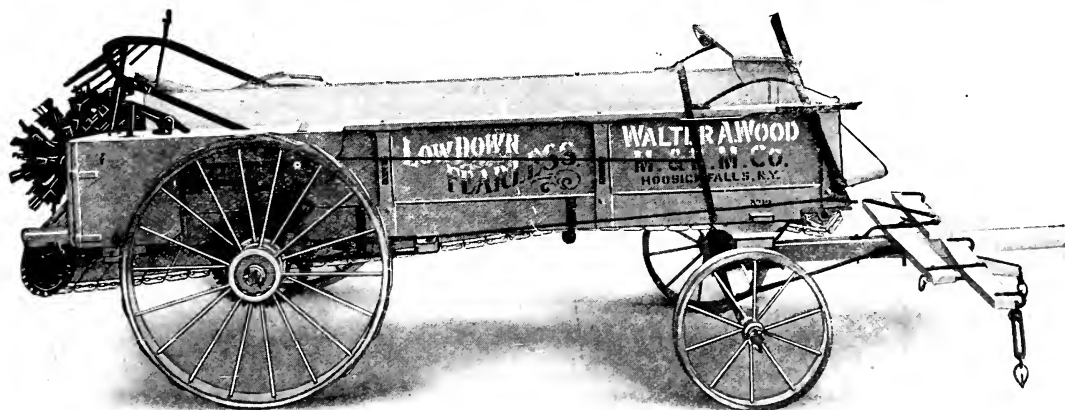
MADE IN THREE SIZES.



This new spreader, the "Curtis Easy Pull," is not a departure from the "Worcester Kemp," but a logical development of it, with a new feature of breaking the load in front of the beater and consequently a saving of the pull on the horses and the strain and wear on the machine. The load splits directly over the "hump in the floor" (a new feature). The beater catches it, already partly broken up. The beater does not have to tear the manure out of the load. The hump in the floor prevents the load from packing on its under side in front of the beater. The beater teeth raise the manure out and do not pack it back into the load. The load does not come up under, but comes down on to the beater. No pulverizer to prevent loading over the rear end. When loading, end gate is down; when spreading, end gate is raised and acts as a pulverizer.

Write for quotations.

"FEARLESS" MANURE SPREADER.



These are the reasons why you will buy a "Fearless": Solid construction, circular beater, widest, most even spread, axles under body, low body, light draft, front truck swings under body, automatic circular rake that levels any load, two levers to control all operations, adjustable spread, ease in handling.

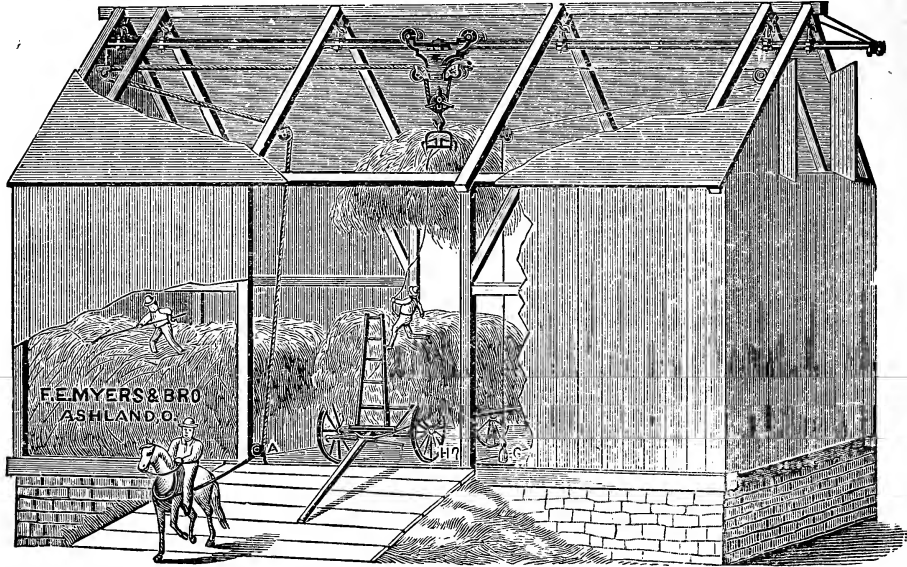
THE "FEARLESS" IS BUILT TO LAST.

The sills are of ash and oak, because they stand the strains and vibration better than steel, and are just as stiff and strong. The frame is braced at all points, so that there can be no warping or twisting and no binding of the apron to make draft heavy. The beater and beater drive mechanism are so strong that we have known the "Fearless" to spread a load of cobblestones as big as your two fists. Yet the beater is so well balanced that, with gears off, it can be turned by the pressure of your little finger. The draft is very light for several reasons. The distance between hitch and rear axle where power is taken is shortest. The apron cannot bind. The beater is perfectly balanced. The load is over the wheels, giving maximum traction. The worm drive never clogs nor springs out of alignment. The box tapers. The front and rear wheels track because the front truck is full width. The tires are wide and both rear wheels drive. Because of wide spread, the wheels never run on the last strip spread and do not slip. The beater does not attack the manure broadside. In securing low body nothing of light draft, wide spread or even spread has been sacrificed.

Price on application.

Prices subject to change without notice. (See note on page 2.)

CUT SHOWING HAY CARRIER AT WORK.



MATERIAL REQUIRED FOR A STEEL TRACK OUTFIT FOR DIFFERENT LENGTH BARN.

FOR A 40-FOOT BARN.—One reversible carrier; 40 feet steel track; 21 hanging hooks; 21 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 110 feet $\frac{3}{4}$ -inch Manila rope; 50 feet $\frac{3}{8}$ -inch trip rope.

FOR A 50-FOOT BARN.—One reversible carrier; 48 feet steel track; 25 hanging hooks; 25 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 130 feet $\frac{3}{4}$ -inch Manila rope; 55 feet $\frac{3}{8}$ -inch trip rope.

FOR A 60-FOOT BARN.—One reversible carrier; 60 feet steel track; 31 hanging hooks; 31 rafter brackets; 5 pulleys; 1 fork; 6 floor hooks; 160 feet $\frac{3}{4}$ -inch Manila rope; 60 feet $\frac{3}{8}$ -inch trip rope.

Different lengths of barns will use track, hanging hooks and rope in same ratio as above.

Above estimates of rope are for an *end hoist*. In hoisting from *center* of barn less rope will be required. When requesting quotations do not fail to give exact length of barn, whether ridgepole or full rafter, and distance between rafters. Also state whether you expect to hoist from end or center of barn.

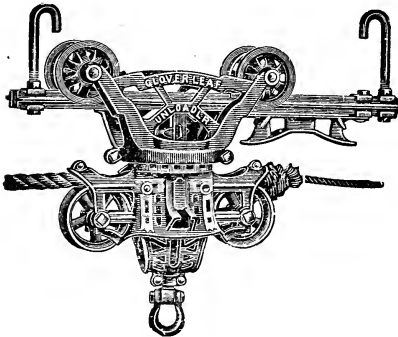
Sections for Mowers and Reapers.

Farmers may have their orders promptly filled by sending directly to us for sections for all kinds of machines.

ALL KNIVES AND SECTIONS WARRANTED.

In ordering send size of section wanted.

Myers' Clover Leaf Steel Track Carrier.



This carrier is made of malleable iron throughout. Has 6-inch truck, and is heavy and substantially made. It is fitted with wide, open mouth to receive the fork pulley when approaching in any direction. Also has swinging fork pulley, which relieves the carrier from all strain when drawing hay over a high beam or into a well-filled mow. The track wheels revolve on $\frac{3}{4}$ -inch turned steel axles. The rope sheaves have longer hub than any other make of carrier.



Rafter Bracket.



Rafter Bracket with Stop.

Write for quotations.

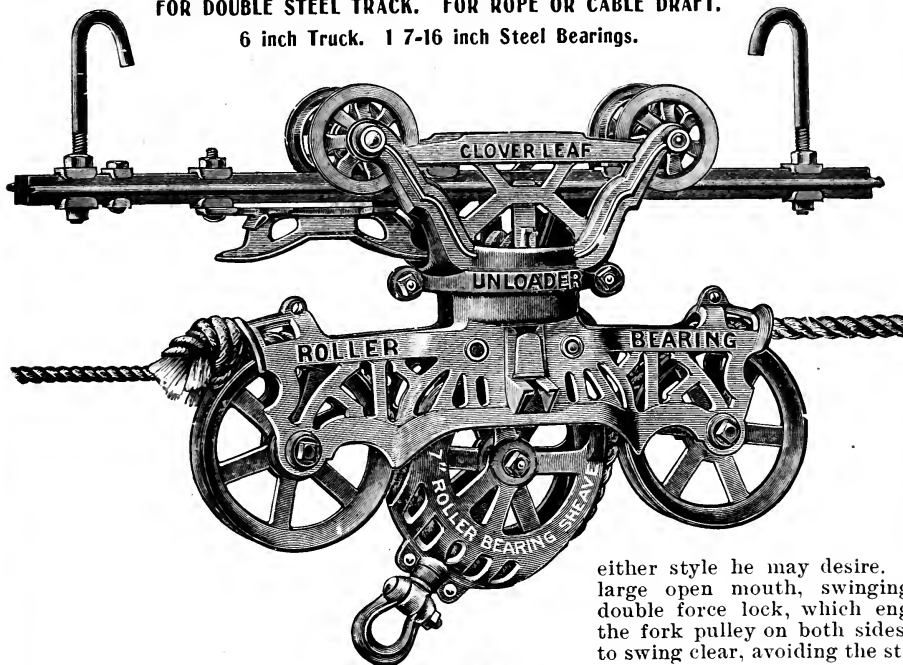
Prices subject to change without notice. (See note on page 2.)

MYERS' CLOVER LEAF STEEL TRACK CARRIER, WITH ROLLER BEARINGS.

SWIVEL AND REVERSIBLE.

FOR DOUBLE STEEL TRACK. FOR ROPE OR CABLE DRAFT.

6 inch Truck. 1 7-16 inch Steel Bearings.



This carrier is made of the best annealed malleable iron, thoroughly braced, which insures strength sufficient to withstand the most severe usage. The rope sheaves are 7 inches in diameter with 1 7-16 inch turned steel bearings. This style of bearing will give more service and is easier to operate than any other style of sheave. The fact that you can use rope or cable for draft is a special feature used only on the Myers', and enables the farmer to use

either style he may desire. It is made with a large open mouth, swinging fork pulley and double force lock, which engages the frame of the fork pulley on both sides, allowing the load to swing clear, avoiding the strain.



Steel Rafter Grapple.

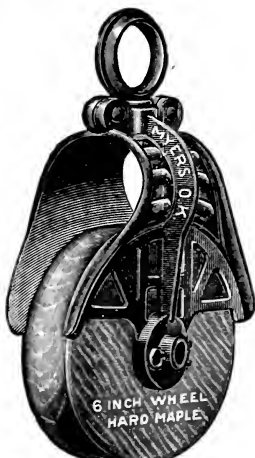


Grapple Fork.

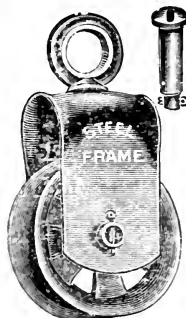


DOUBLE HARPOON FORK.

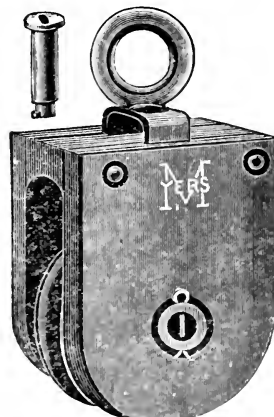
Made from wagon spring steel, which will not bend or spring out of shape.



Knot Passing Pulley.



Steel Frame Pulley.



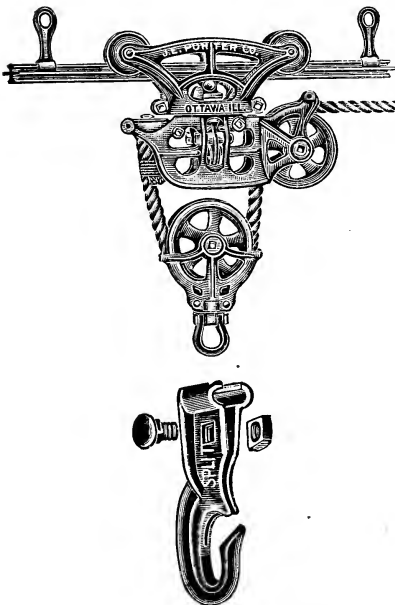
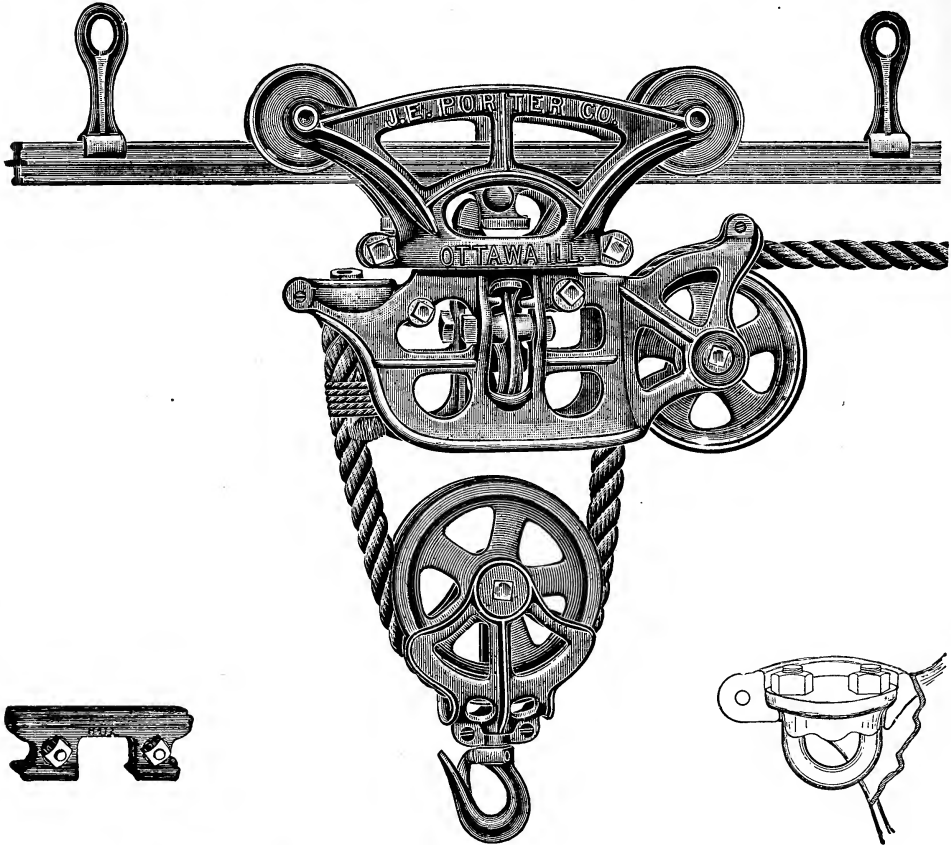
Reed Pulley, with Hook or Eye.

Write for quotations.

Prices subject to change without notice. (See note on page 2.)

PORTER

STEEL AND WOOD TRACK ROLLER BEARING HAY CARRIERS.



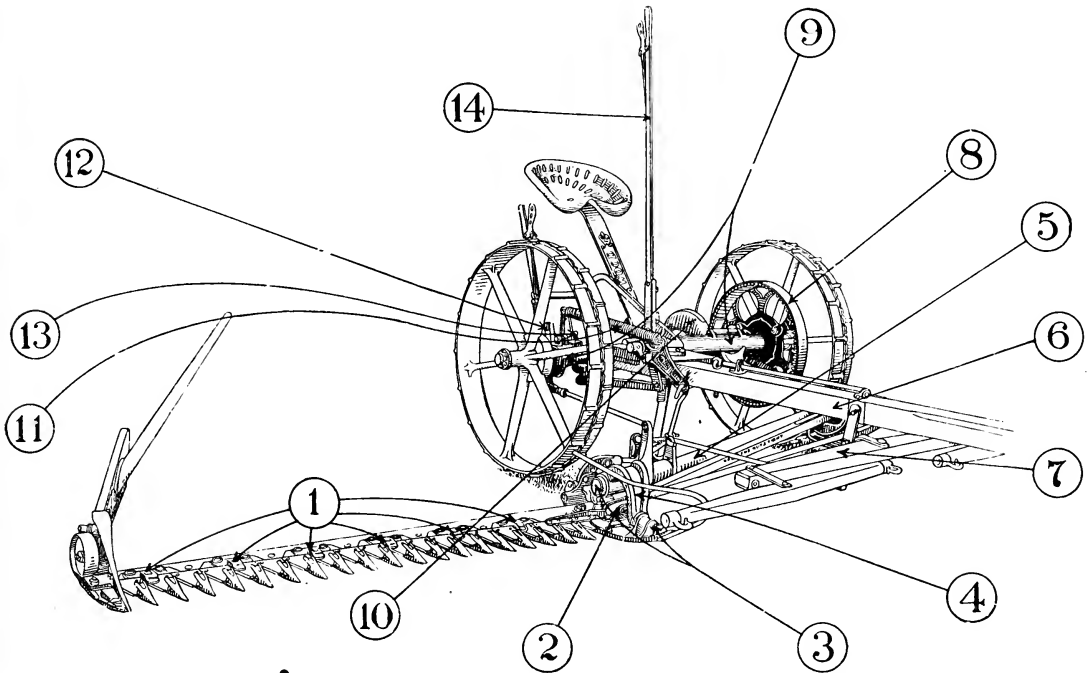
All the essential and practical elements which by experience have been found to give correct results are embodied in this carrier. Even under the most adverse conditions there has never been any doubt regarding the ease or precision with which it operates.

Especial attention is directed to the well braced frame embodying the swiveled feature for reversing the carrier; the extra large sheaves which have *roller bearings*; the rope swivel, a device for relieving the strain in a twisted rope; the twin-acting dogs which grip the fork pulley firmly; and the wide beveled mouth of the carrier which guides the pulley properly, regardless of the angle at which the latter strikes the carrier.

The rope sheaves in the carrier and fork pulley are six inches and seven inches in diameter respectively; these lengthen the life of the rope and permit the load to be elevated with a great reduction in power.

Prices subject to change without notice. (See note on page 2.)

THE WALTER A. WOOD NO. 2 VERTICAL LIFT MOWER.



The performance of the Vertical Lift Mower in the field has proved beyond doubt that this is the most perfectly constructed, most perfect running mower ever put on the market by any concern. Wherever the Vertical Lift has been introduced the demand far exceeds all estimates. This, in our opinion, is a very striking indication of the way the Vertical Lift satisfies its users and increases in popularity each season.

No. 1. Maximum number of sickle holders to hold knife to ledger plates.

No. 2. Large size ball and socket for knife head and for lower end of pitman.

No. 3. Large 24^{mm} pins for bar turned to an accuracy of 1-40^{mm}.

No. 4. Heavy cast iron "hanger." Will not bend.

No. 5. "Drag bar" is of heavy high carbon steel. Will not bend.

No. 6. Balance wheel adjusted accurately to prevent vibration of machine.

No. 7. Hitch is perfectly balanced so that there is no neck weight on horses.

No. 8. Internal drive gear of perfect mechanically moulded teeth. Runs quietly and with little friction.

No. 9. Main axle bearings are rollers.

No. 10. At rear of mower the bevel gear is adjusted by a screw held by lock nut. Thrust of gear comes on a glass-hard iron thrust disc.

No. 11. One balance spring does all the work of exactly balancing outer end of cutter bar, inner end of cutter bar and frame. Pole can be detached from frame without taking off spring.

No. 12. Tilt quadrant rigidly fastened to frame. Will not come loose and destroy tilt.

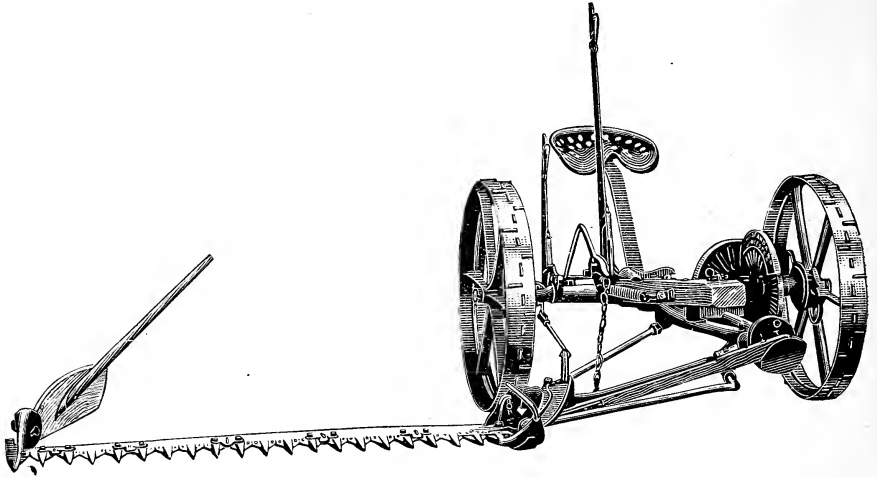
No. 13. Large set screw tightens balance spring and takes weight off of the foot lever.

No. 14. Bar can be raised to vertical position with hand lever. Simple automatic roller cam disengages clutch.

Prices subject to change without notice. (See note on page 2.)

The Worcester Buckeye Mower.

EASY TO HANDLE, LIGHT DRAFT, QUIET RUNNING, LONG WEARING.



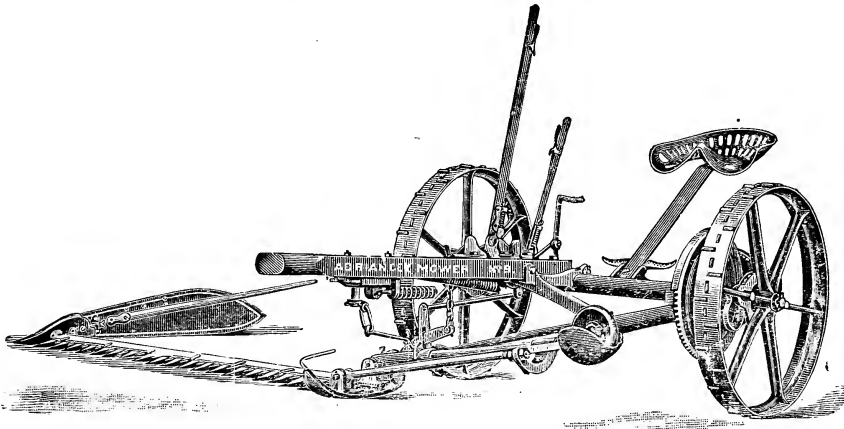
ONE HORSE.
4-foot cut.

TWO HORSE.
5-foot cut.
6-foot cut.

These mowers are made in three sizes. The one-horse mower is the smallest, but is designed just right to carry a 4-foot cutter bar. The 5-foot is a broad and strong mower, carrying the bar steadily. The 6-foot is a very broad frame, heavier than either of the others, and extra strong.

The **Worcester Buckeye** is sold everywhere in the east and is popular wherever it is sold, but it was first built for Maine and Massachusetts. It is particularly well made. Runs like a watch. Try one of the new ones and you will be convinced.

THE ADRIANCE MOWER.



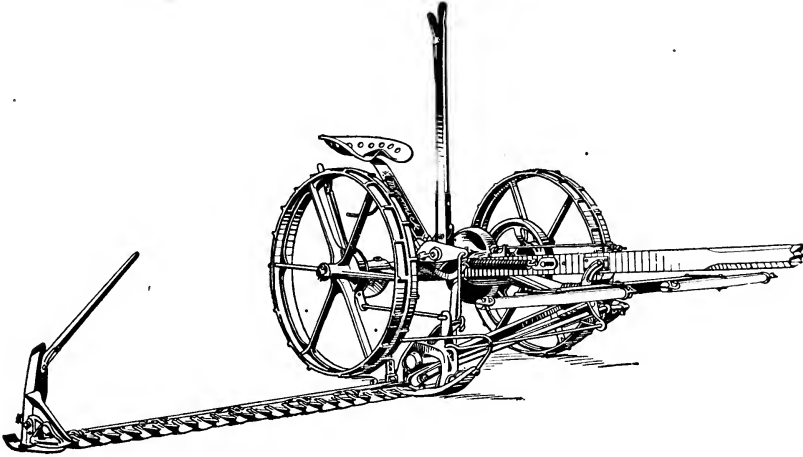
The accompanying illustration shows the **Adriance** Mower as built for 1920, and, with its modern construction and perfection of design, contrasts sharply with the earlier models of the **Adriance**. While these old-time machines (the first of which was built in 1858 and which was still running in 1901, and the second, which was built about 1865) are widely different in appearance, having the heavy oak frame and the wooden wheels, yet the underlying principles of the construction of the **Adriance** Mower have been the same since its invention in 1855.

The first mower was built with the square-cut gears, which were later supplanted by the internal gears, quite similar to those still in use. The floating bar with the coupling hinges in line with the crank shaft was the most notable feature of the **Adriance** Mower of 1885 and is to-day one of the most important features found exclusively on **Adriance** machines.

Price on application.

Prices subject to change without notice. (See note on page 2.)

Deering or McCormick Mowers.

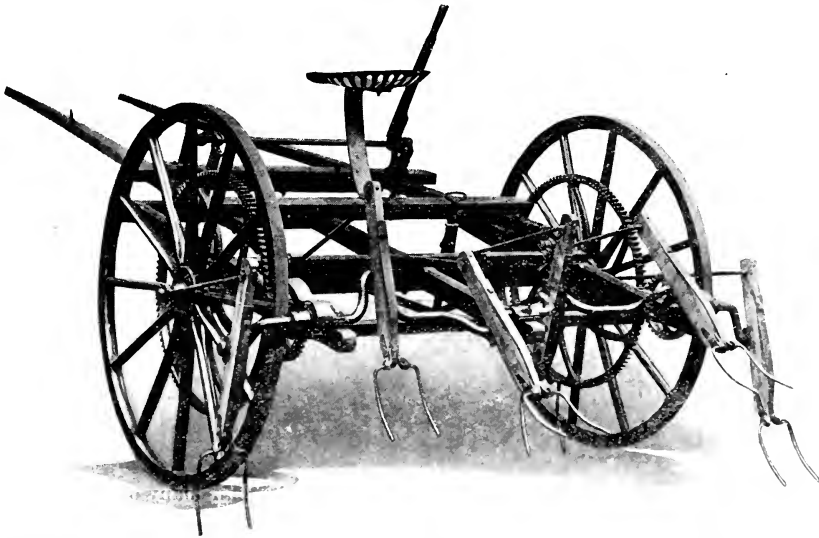


When you buy a mower you want one that will cut the grass without clogging, without wasting grass or putting excessive strain upon the horses. The Deering or McCormick can be depended upon to do this day after day and year after year, even though the conditions may not always be favorable. Here are some of the reasons why:

Cutter Bar Follows the Ground—Suppose your ground is not level. With the ordinary mower you are likely to be troubled by lack of traction, because the cutter bar runs up on to a hummock and raises the right wheel off the ground. On the other hand, when there is a sudden low place, the mower will waste grass, because the cutter bar cannot drop low enough to get it all. With the Deering or McCormick the cutter bar follows the ground. The cutter bar is free to rise and fall on the hinges of the drag bar. It will run up on to a sudden rise or down into a gulley without affecting the traction or wasting grass.

Price on application.

THE BULLARD HAY TEDDER.

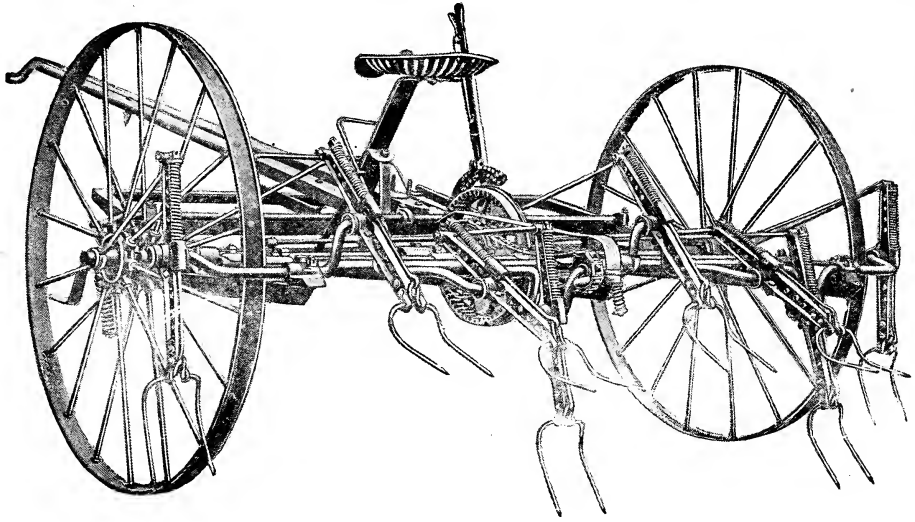


Takes the hay up from the bottom, shakes it in the air and leaves it lightly on the ground for the sun and air to complete the work of hay making. Does not shake to pieces. Is elastic but tough. The crank shaft split in the middle makes it easy for the horse to turn. Two tension springs on the tilting frame, together with the new Mudgett fork springs, prevent breakage of wood arm. The forks on either side are driven independently by the wheel nearest them, so that this tedder can be turned while it works, without straining the tedder or horse, and do good work all the while. If you want to get a tedder that will do its work in the right way, with the least fuss and bother, and that gives you the most lasting satisfaction, buy a Bullard.

Price on application.

Prices subject to change without notice. (See note on page 2.)

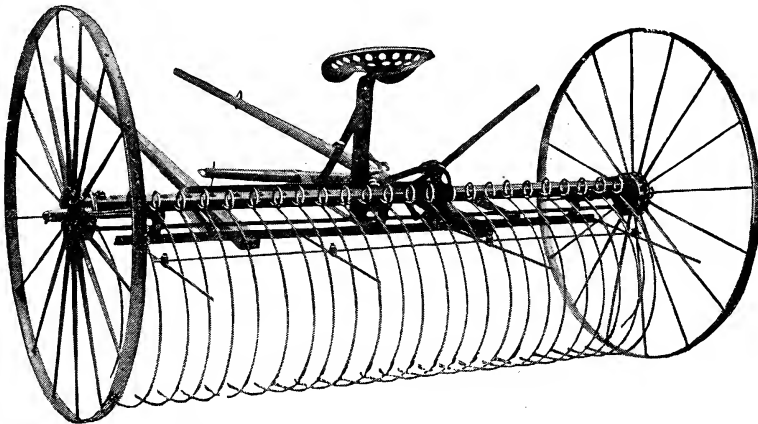
THE WALTER A. WOOD TEDDER.



The Wood Tedder is built very strongly and substantially. Its construction will withstand all the jar and strain caused by the rapid motion of the fork arms. Strong springs absorb the vibration so that it does not reach either driver or team. Power is transmitted by chain and sprocket from the main axle to the fork arms so that the mechanism works smoothly and evenly. The motion of the forks has been so timed as to toss every bit of hay. Outside forks toss the portion just passed over by the wheels. It is equipped with roller bearings in the places where friction would be most likely to occur.

Price on application.

THE WALTER A. WOOD ALL STEEL RAKE.



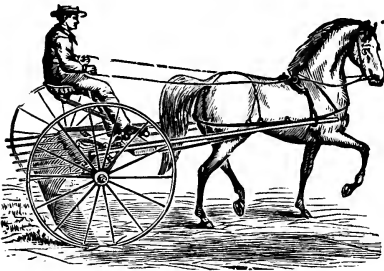
Will do the work better, rake cleaner and dump more accurately than many other rakes on the market. The teeth lie 8 inches to 10 inches on the ground—every bit of hay is raked. The Wood Rake never spills the hay at the ends. Everyone needs a rake that he can depend on at all times to do the work right and to stand up under the constant wear and tear of work in all kinds of fields. If you have had any experience you know that there is no economy in buying a cheaply made, nicely painted machine that soon breaks in important parts or racks itself to pieces in a season or two. The only really economical rake has a long life, and that is why we offer the Wood Rake. Its strong and substantial construction assures you a service of many years.

Price on application.

Prices subject to change without notice. (See note on page 2.)

THE YANKEE HORSE RAKE.

SOME OF THE LEADING POINTS OF SUPERIOR EXCELLENCE FOUND IN THE YANKEE HORSE RAKE.



Simplicity in construction and excellent quality of materials.

Adaptability to rake anywhere, whether the fields are rough or smooth or the hay green or dry.

Rake head adjusted so as to balance the weight of the teeth.

This device completely prevents the teeth from dragging heavily and digging into the ground or filling the hay with dirt and dust. Teeth run level with the ground at their points.

Each tooth is perfectly independent in action and supplied with a yielding spring that will allow it to pass safely over any obstruction that the axle can pass over.

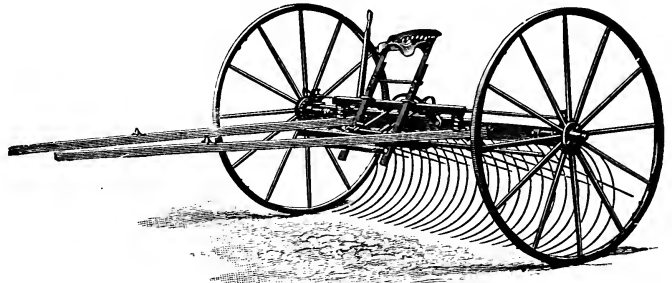
Price on application.

THE "K. & W." HORSE RAKE.

THE WAY THE RAKE YOU BUY OUGHT TO BE MADE.

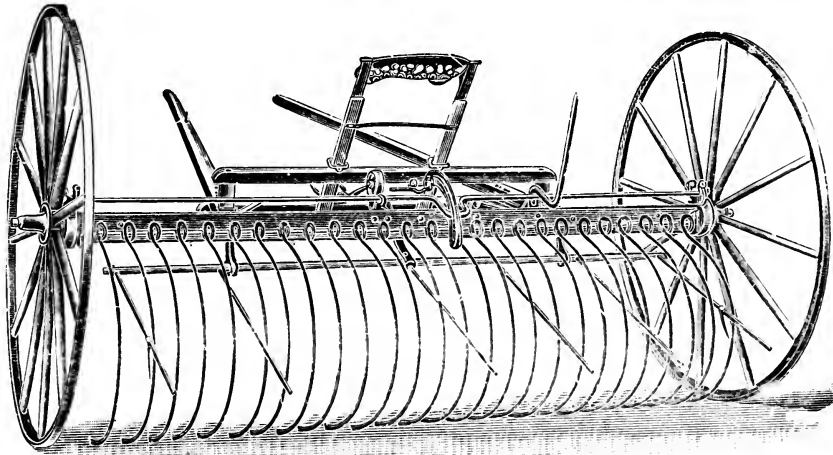
Wood construction, braced at every corner, steel truss rod under the axle bed, highest grade of material used throughout. Light but strong and will outwear any other rake. Sled-runner teeth, with a coil loop near the upper end. Rakes clean everywhere, but does not dig and never injures the grass roots. Not one new tooth furnished in a hundred sales. This rake will not roll hay. Any boy can handle it.

Price on application.



The "Genuine" New York Champion Hay Rake.

EITHER IN WOOD OR STEEL. STRONG, SIMPLE AND DURABLE.



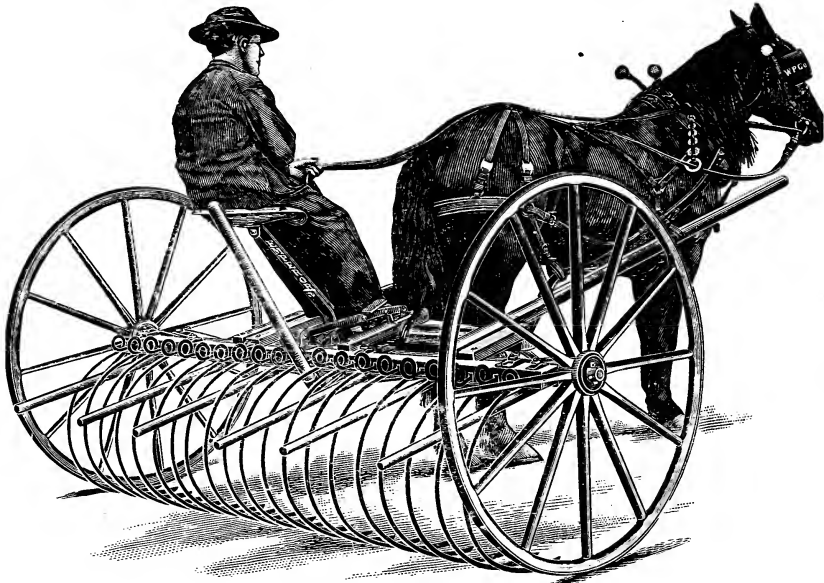
A "Genuine" New York Champion means to many thousand farmers the standard of all rakes—one that is always in perfect condition whenever it is wanted. It cleans the ground thoroughly without taking up dirt, and works with ease and convenience, in heavy or light crops, on level fields or hillsides.

Dumps with one-piece rod from both wheels at once—this makes even draft. Levers, hand and foot, give the driver control at all times.

Price on application.

Prices subject to change without notice. (See note on page 2.)

The Wiard Emperor Sulky Rake.



Many sulky rakes at the present time are only imitations of those made under old and expired patents, containing no improvements whatever, while in some cases changes have been made that are positively injurious to the working of the rake. Our Emperor Rake is the result of long and careful experiment, the dumping parts being entirely new and far different from anything else made. The rake is dumped with the greatest ease and with less wear, tear and jarring than any other positive dump rake. We furnish these rakes with the foot dump, in the following sizes:

8 feet wide, 24 teeth.

9 feet wide, 26 teeth.

Among the many new and valuable features of the Emperor we call particular attention to the following:

1. A Doubly Trussed Frame that prevents sagging; whenever a rake frame sags in the center there is trouble in dumping and the axle is liable to break; the Emperor cannot sag.

2. A Hand Lever that Does Not Change Position when the foot dump is used. On many rakes this lever flies forward and back, sometimes striking the operator and causing serious injury.

3. A Revolving Steel Axle and Dumping Device that cannot get out of order. Steel axles are best and most durable. Wood axles with castings for the wheels get rickety, sooner or later, and cause trouble.

4. A Dumping Ratchet, with Flanges, that strengthens the axles. In many rakes this is the weak spot, but the Emperor is especially strong at this point.

5. A Reversible Dump Dog of hardened steel. The dog is so attached that it can be changed to four different positions and will last a lifetime.

6. A Cam Action for Releasing the Dog and dumping the rake, without shock, jar or noise. This is an entirely new dump, the best thing ever invented, and covered by our patent.

The Emperor is the finest rake upon the market to-day. It has an adjustable seat, secure foot rest, best selected material, steel axle and truss rods, hickory cleaners, *wood wheels of our own make*, with rounded felloes and clipper joints.

7. A Flexible Joint, by which the teeth may be held down to their work or carried high for any distance with the same foot. This is a great convenience, especially in going from one field to another; it holds the teeth right to their place in raking heavy grass or bunching hay.

8. The Tooth Head is so attached that the teeth keep their place and rake clean, even when going down the steepest hill. This cannot be said of those rakes whose heads are hung on, or almost on the center; they will not stay down to business going down hill, and the Emperor will.

9. The Teeth Drop Instantly, without Jarring, and leave a most compact windrow in the best condition for putting into cocks or bunches.

10. The Teeth are flattened and have chisel points that will not dig, take up least dust, offer less resistance and reduce draft.

11. The Interchangeable Hub Cap, which can be used either right or left, is a great saving.

12. We furnish short teeth at end to keep hay out of wheels, and **hooks** to keep hay from rolling, when so ordered.

Price on application.

Prices subject to change without notice. (See note on page 2.)

The Walter A. Wood Gearless Hay Loader.



In this new loader we have what we consider the latest and best gearless loader that has been designed up to the present time.

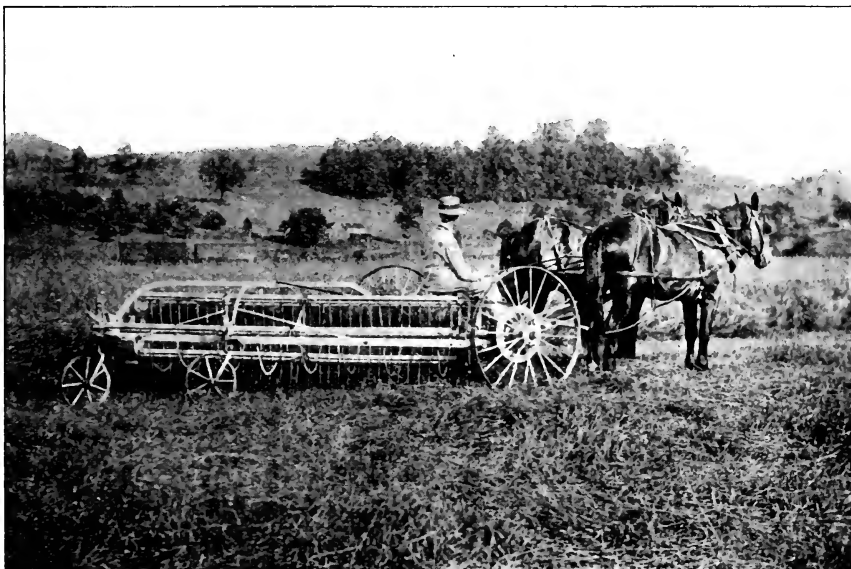
This loader has been submitted to many severe tests, and has proved itself to be a most successfully working machine, both in the class of work it does and the way it does it.

Many people who are thoroughly acquainted with the performance of other makes of loaders have witnessed this loader in operation under every possible kind of conditions and all have pronounced the Wood to be the most perfect working loader they have ever seen. We confidently recommend the Walter A. Wood Gearless Hay Loader to all of our customers as a machine that will give them the best of satisfaction.

The Walter A. Wood Cylinder Side Delivery Rake.

This machine has been given a most exhaustive trial in actual working conditions, and the tests to which it has been submitted during this trial period were perhaps more severe than the average work it will be called upon to perform by those who buy it, thus proving that the Wood Side Delivery Rake is worthy of a place in the famous Walter A. Wood line of machines, and we heartily recommend it to everyone who is in the market for a machine of this kind.

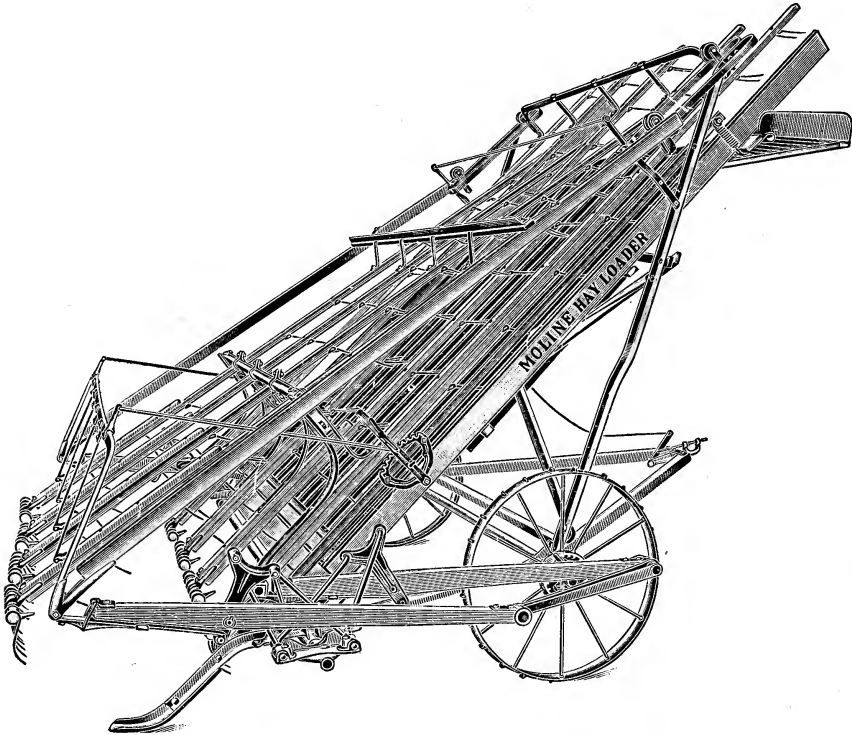
This Cylinder Side Delivery Rake combines strength, durability, light draft, ample power and efficient working qualities. It is adjustable to the different conditions that are encountered in the hay field so that it can be made to do good work at all times. It is a machine that will give long, satisfactory service and therefore it is a machine that will yield good dividends as an investment.



Price on application.

Prices subject to change without notice. (See note on page 2.)

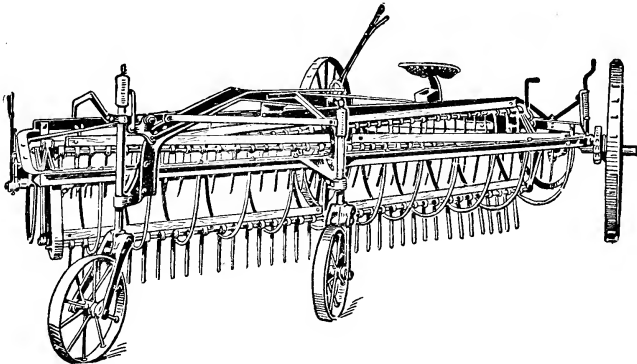
MOLINE HAY LOADER.



This loader handles, without adjustment, either the lightest swath or the heaviest windrow. The yielding deck, held by strong springs, accommodates either heavy or light crop. It is a "one man loader." With it anyone who can drive a team can go out to the meadow and bring in a load of hay. It has no cams, webs, drums, chains, sprockets, gear wheels, and no "delays." It is the most simple, direct and positive, and the most durable loader on the market.

Price on application.

MOLINE CYLINDER SIDE DELIVERY RAKE.



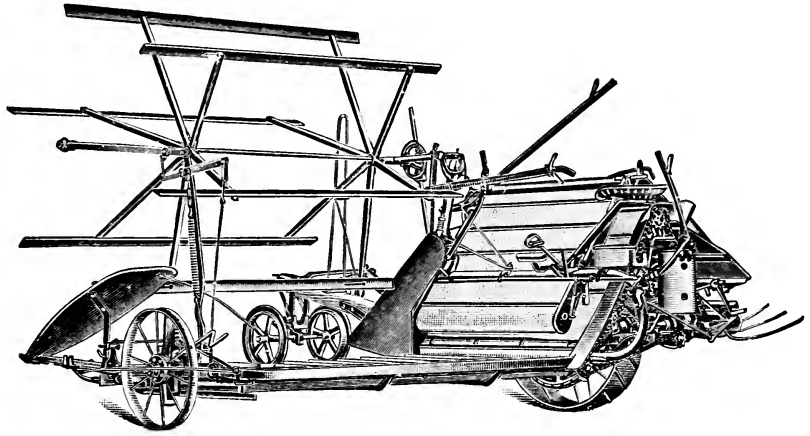
Gears are strong and durable. Power is derived from both main wheels, which are of steel of the most approved and up-to-date type. Strippers for the teeth are made of spring steel so that they will maintain their correct shape and position. A three-bar raking cylinder, carried by a heavy pipe axle, with the bars supported in the middle. By moving a lever the teeth may be set at any angle desired. A comfortable spring seat is provided that places the driver where he may easily operate the rake. This machine is a decided step in advance of any cylinder rake on the market. It is of all steel frame construction, well braced and made strong in all its parts, and is adapted for all kinds and conditions of hay.

Price on application.

Prices subject to change without notice. (See note on page 2.)

MOLINE (ADRIANCE) GRAIN BINDER.

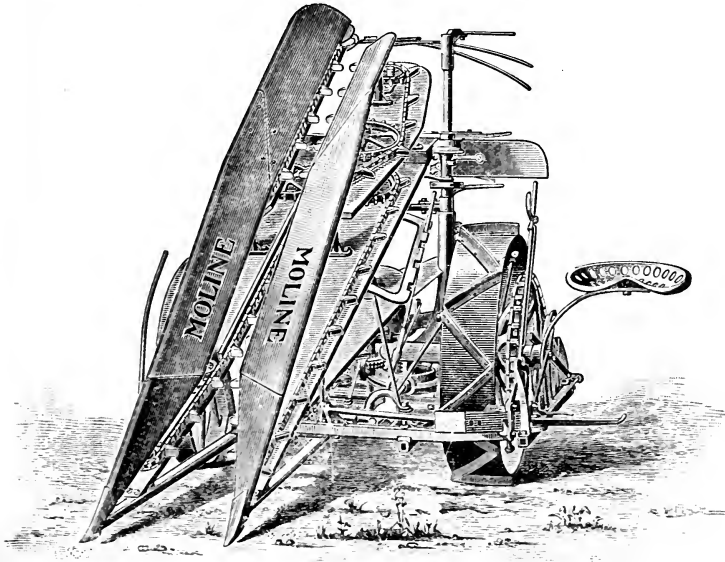
A binder is made up of many parts, some structural, some operative. Weakness in any one of these parts will immediately cause trouble with the entire machine. In general appearance, binders of the various makes are all very much alike. They all work more or less satisfactorily, especially when new and under favorable, or even ordinary, conditions. In the selection of a binder, the prospective purchaser should consider these



points: Is the machine well built and strong enough to stand the hard usage I shall be obliged to give it? Has the matter of light draft been given full consideration? Will my team be able to handle it with ease? Is its mechanical construction such as to satisfy me that it is able to handle not only light standing grain, but heavy and lodged grain as well? Is it simple and easily taken care of? We shall undertake to answer these questions by calling attention to the details of the construction of the **Moline (Adriance) Binder**.

To be superior to all other binders, it was necessary to build the **Moline (Adriance)** more carefully, of finer materials, in more perfect proportions, with more rigid inspection, combined with a thorough knowledge of the conditions to be met in harvesting all kinds of grains in all sections of the country. The **Moline (Adriance) Binder** is the result of sixty years of continuous experience in building harvesting machinery. It has been sold extensively in foreign countries, where operators are unskilled in the

MOLINE (ADRIANCE) CORN BINDER.

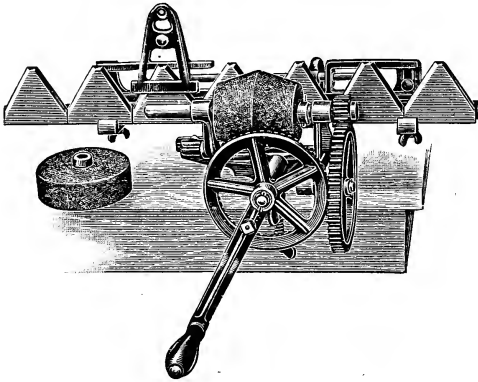


use of machinery; where repair shops are few and far between. In countries so distant that an expert could not be sent, **Moline (Adriance) Binders** have given such satisfactory service that the number in use has increased annually by leaps and bounds. This great increase is not due to any one particular feature of merit, but to its superiority in every way. The test of a machine is not in one season's use in standing grain of average height, but it is in the years of service - in extremely tall or short grain and under adverse as well as favorable field conditions. In short, the **Moline (Adriance)** contains all the points of merit known in the construction of corn and grain binders, as thousands of satisfied farmers can testify.

Write for complete descriptive catalog.

Price on application.

Prices subject to change without notice. (See note on page 2.)



"TWO IN ONE" GRINDER.

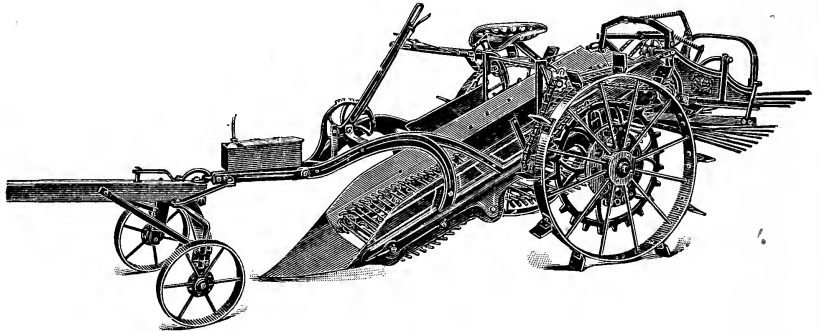
May be handily and securely fastened to bench, table, or, while in the field, to the mower wheel.

The **Mower Knife Holder** is capable of any adjustment desired, and firmly holds the mower knife with two guides or rests adjustable for any width or thickness of knife backs, and requires no change after the first adjustment; the spring clamp allows shifting of the knife to any position while grinding. The entire weight of the knife is carried by the holder, and the operator has full view of the work, and easily controls the pressure and governs the grinding. Are equipped with vitrified corundum grinding wheels, the hardest, sharpest and fastest cutting abrasive known.

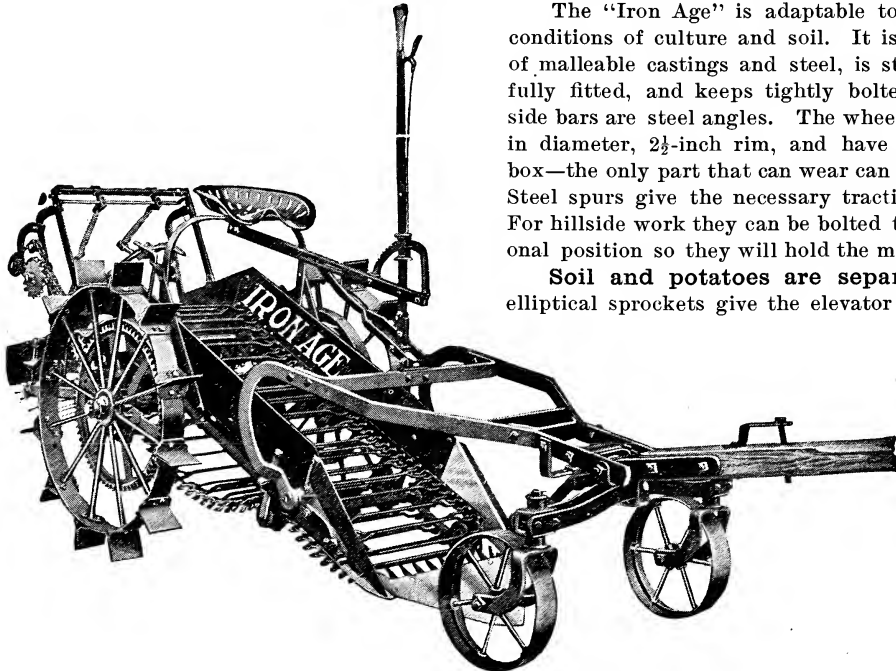
The Hoover Potato Digger.

A digger built on the right principle to do good work, and with years of experience to prove it.

The shovel, elevator and vine separator are especially constructed to make the Hoover one of the most perfect working diggers on the market.



IRON AGE POTATO DIGGER.

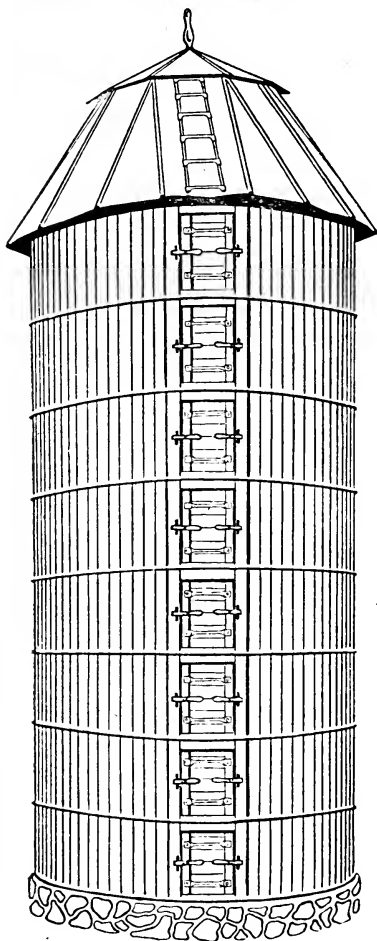


The "Iron Age" is adaptable to a wide diversity of conditions of culture and soil. It is built almost entirely of malleable castings and steel, is strong, compact, carefully fitted, and keeps tightly bolted. The main frame side bars are steel angles. The wheels are steel, 28 inches in diameter, 2½-inch rim, and have cast removable hub box—the only part that can wear can be cheaply replaced. Steel spurs give the necessary traction for level ground. For hillside work they can be bolted to the rim in a diagonal position so they will hold the machine from slipping.

Soil and potatoes are separated thoroughly — elliptical sprockets give the elevator apron just the right automatic movement. The shaker completes the separation. The elevator chain (apron) consists of interlocking cross bars of steel, has no unnecessary tension, and is driven direct by gearing from both main wheels.

Price on application.

Prices subject to change without notice. (See note on page 2.)



NAPPANEE CLIMAX SILO.

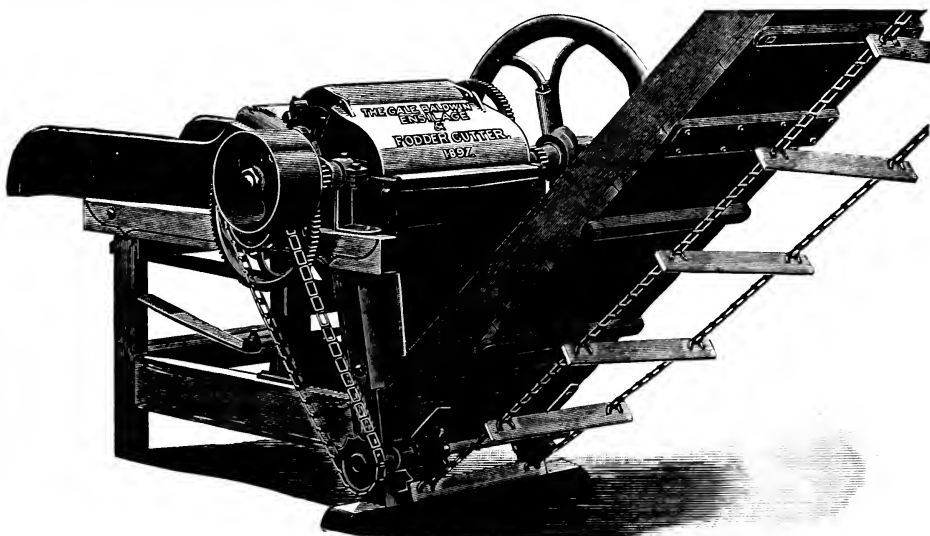
WORLD'S BEST LUMBER USED IN ITS CONSTRUCTION,
OREGON FIR AND LONG LEAF YELLOW PINE.

Every feature that enters into the make-up of the Climax Silos is given careful consideration, even to the small details. The doors are bolted on to the cleats instead of being nailed. This makes a solid construction and one which will keep the doors in perfect condition, even if they are subjected to a great amount of abuse. Between the door and frame there is a layer of felt packing and this insures an air-tight joint. The levers for clamping the doors in place have a great amount of purchase and the construction is of such a nature that no end of leverage can be secured. The perfect ladder construction is a winning feature and the heavy rungs which are used in the construction are made from fourteen gauge steel, pressed into a circular shape by most powerful machinery, giving great strength to the entire construction. The cross pieces between the uprights are flush with the edges on the outside of the silo and on the inside overlap and are bolted to the uprights, thus being uniform with the doors. In order to make a lap at the top and bottom for each door, the inner cross pieces are made one-half the width of those on the outside. This makes an individual opening for each door and the doors are interchangeable. The frame in the Climax Silo is beveled to correspond with the circle of the silo so that when the hoops are applied there is an even tension at all points. The hoops are held in position with special staples.

Price on application.

THE GALE-BALDWIN ENSILAGE AND FODDER CUTTER.

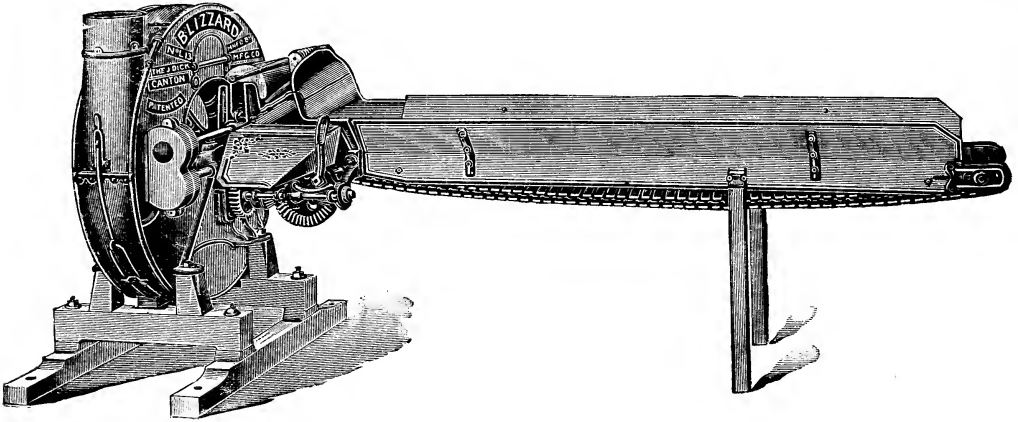
A very successful machine made for light power, and one which is easy to feed, easy to keep in order, and is very durable. Cuts with great rapidity hay, straw, corn stalks, ensilage, etc., and the improvements lately made have proved to be exactly what was needed to make this machine one of the most perfect and easiest working ensilage and fodder cutters.



Price on application.

Prices subject to change without notice. (See note on page 2.)

"Blizzard" Ensilage Cutters and Blowers.



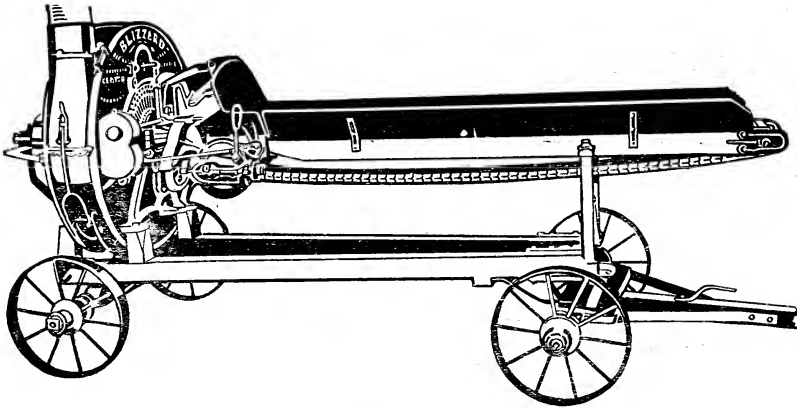
L 18.

The "Blizzard" Ensilage Cutter was the first of the "Blower" type—a quarter of a century ago—it has always led the way. Year after year minor improvements have been made, as exhaustive practical tests have proved them worthy of adoption.

It is evident that a cutter which works steadily, takes whatever is fed to it without a hitch, and is so built that it outlasts any machine of its kind, is the most profitable machine to buy.

The "Blizzard" is that kind of a machine, built for endurance and satisfaction, is substantial all the way through.

The self-feed table enables it to eat up green or dry fodder with astounding rapidity and with very little attention from the operator. It practically runs itself.



M 21.

Simplicity and safety have been the keynote of "Blizzard" success. It contains fewer parts than any other machine of its type, and because of this the setting up and taking down is an easy matter. Shipped in two sections, the machine is made ready for operation by simply putting parts together and tightening burrs on six bolts—no especial mechanical "knack" is required.

All main parts are encased with a rim of heavy wrought steel. Every machine is tested at double the required speed for operating. Never has a "Blizzard" broken down under the test. It makes a safe machine to operate.

Even, clean-cut silage at all times. The knives of the "Blizzard" make a perfect shear cut—they pass through the ensilage cleanly and evenly. No matter how much or how tough the material, it does not choke or cut unevenly. This means silage that packs better, keeps better—makes better feed, which increases milk yield.

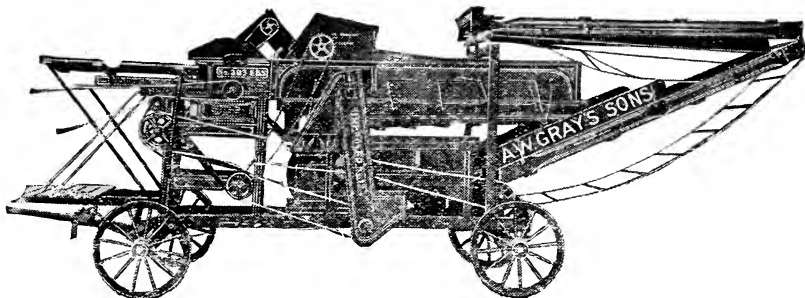
Complete descriptive catalog and price list on application.

Prices subject to change without notice. (See note on page 2.)

Gray's New Thresher Nos. 305-306,

WITH TAILINGS ELEVATOR, BAGGER, STACKER, ETC.

Nos. 231-261 also in stock.



This thresher has been remodeled and reconstructed, and while built along the lines of regular threshers a number of radical changes have been made, one of the principal ones being that it is arranged so that it commences to separate the grain from the straw as soon as it leaves the cylinder, thus meeting the special benefit claimed for the undershot threshers.

It is built especially to meet the demand for use with gasoline engines, is made with 18 x 30 cylinder, but two different sizes of separators have been added to admit using different size engines and are numbered 305 and 306.

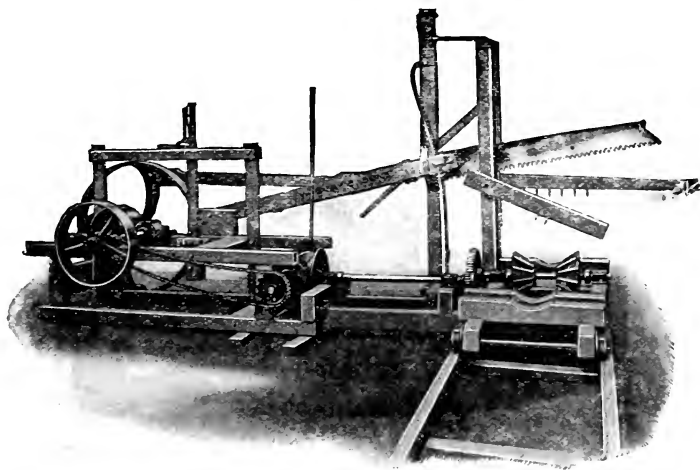
Price on application.

GRAY'S INDEPENDENT DRAG SAW MACHINE.

FRICITION DRIVE, TO RUN BY ENGINE OR OTHER POWER.

This is the latest and best drag sawing machine on the market.

One of the most important points in using the drag saw is to be able to start it slowly, thus removing any danger of breaking or bending the saw, and this is accomplished perfectly by using the friction transmission. Another feature is to be able to stop instantly, and this is arranged for in this machine as the moving of the break lever releases the friction pulley, at the same time

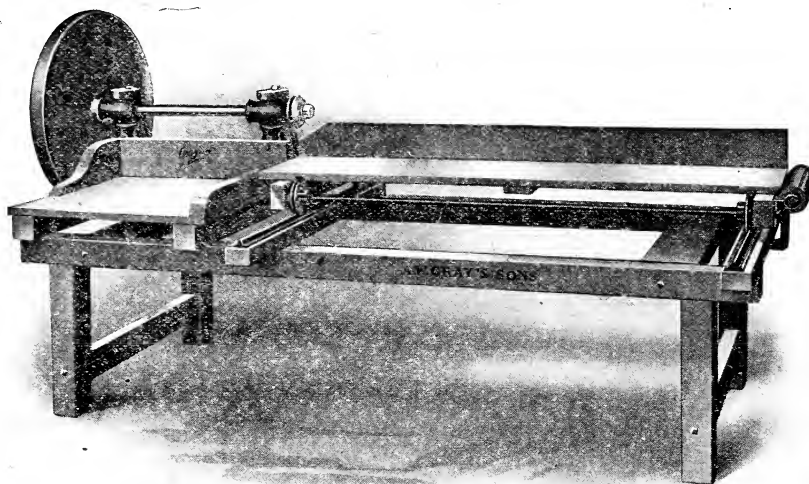


applies the brake on the balance wheel, thus stopping the machine instantly. By changing the size of the driving pulley on the counter shaft, these machines may be adapted to almost any style of power.

Price on application.

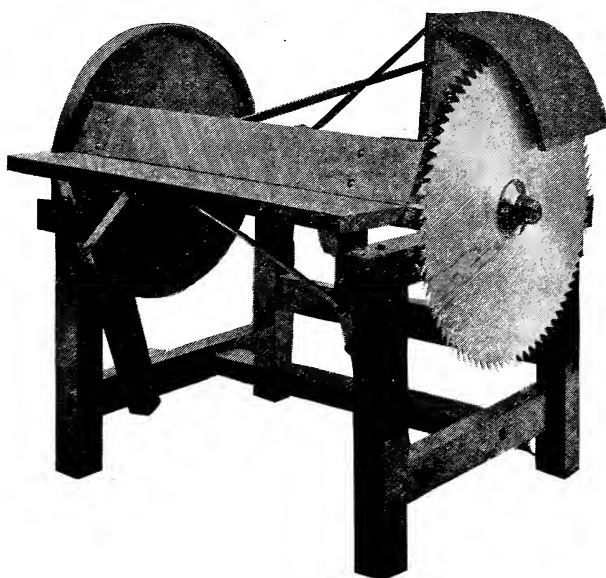
Prices subject to change without notice. (See note on page 2.)

GRAY'S CIRCULAR POLE SAW, WITH SLIDING TABLE, NO. 5.



There is a demand for moderate priced machines of this style for sawing poles or cord wood into stove lengths, or shorter. Owners of wood yards and those who have odd jobs can use them. If you have enough work to pay we recommend our sliding table machines. They are more easily handled, more durable. The sliding table has a roller at one end for convenience in handling long poles, and on all saws the balance wheel and pulley are interchangeable. These machines can be equipped with either 24, 26, 28 or 30 inch saws, each frame being adapted to either size saw blade, and are also arranged to receive the blade on either the right or left side. In ordering please specify whether right or left hand saws are desired. All machines are provided with a $1\frac{3}{8}$ -inch cold rolled steel shaft, and the balance wheels are extra heavy, insuring a smooth and satisfactory running saw.

Gray's Circular Cord Wood Saw, WITH TILTING TABLE, NO. 7.

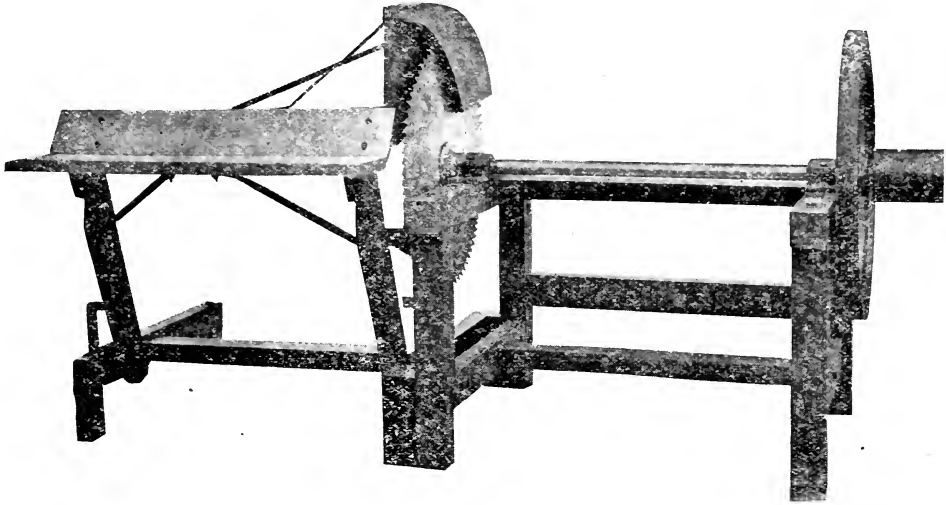


Price on application.

Prices subject to change without notice. (See note on page 2.)

Gray's Circular Pole Saw Machine,

WITH TILTING TABLE NO. 9.



These are made with a table both sides of the saw, which is better adapted for sawing long wood, and can be used for sawing four-foot wood into stove wood.

Price on application.

FAIRBANKS-MORSE KEROSENE OR GASOLINE ENGINES.

1 1-2, 3 AND 6 H. P. "Z" ENGINES HAVE THESE DISTINCTIVE FEATURES.

1. Economically use kerosene as well as gasoline.

2. Run successfully on these fuels under light or heavy load—you don't have to make readjustments.

3. Bosch high tension oscillating magneto eliminates batteries and battery troubles—means quick starting.

4. Throttling governor assures constant, reliable power. It makes the engine run smoothly.

5. Suction fuel feed—no pump—simple and reliable.

6. Convenient speed controller gives change of speed, if desired, while engine is running.

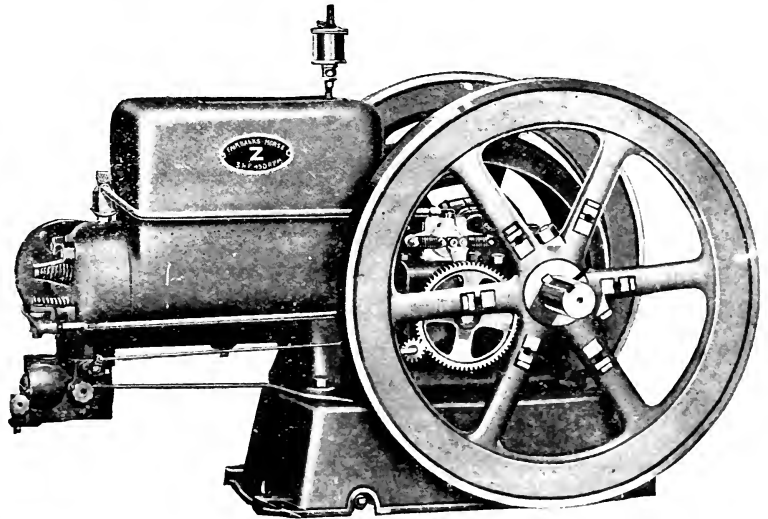
7. Removable bushings in bearings.

8. Close speed regulation.

9. Ample positive lubrication.

10. Practically automatic in operation, requiring but little attendance—easily started and stopped. Run smoothly, quietly, cleanly.

11. Furthermore, every bit of metal in these engines is effectively used to give greatest strength without excess weight. The crank shaft is of forged steel with extra large bearing surfaces—it is built for long life. The interchangeable die-cast liners in main and crank bearings are easy for you to replace if necessary.



Price on application.

Prices subject to change without notice. (See note on page 2.)

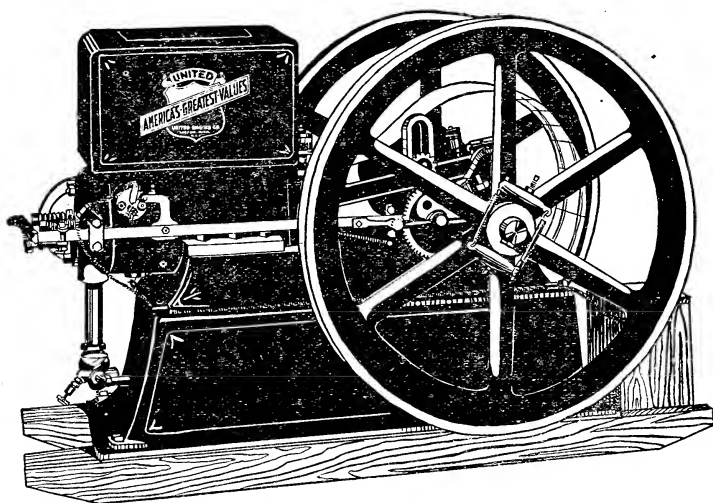
GASOLINE OR KEROSENE ENGINES.

ASK YOURSELF THESE FOUR QUESTIONS WHEN YOU CHOOSE YOUR ENGINE.

1. How long has the manufacturer been in business?
2. What is the performance record of the engine?
3. How many engines are there in use?
4. What is the general opinion of the users?

THESE ANSWERS TELL THE STORY.

Ten years of fair and square dealing; a performance record so far exceeding the record of so-called "competitors" with more than 200,000 United Engines in use, and with these hundreds of thousands of users loudly proclaiming the merits of their engine to their neighbors—with all these forceful factors at work it is no wonder as each day goes by that hundreds of farmers go to United Engine dealers and say, "I want the United Engine because I believe the best engine will cost me less money in the long run than the cheapest."



COMPARE THESE SPECIFICATIONS WITH OTHERS.

Horse Power.	Approximate Shipping Weight. Lbs.	Bore. Inches.	Stroke. Inches.	Diameter Fly Wheel. Inches.	Diameter Crank Shaft. Inches.	Weight Fly Wheel Each. Lbs.	Pulley Diameter Face. Inches.	Speed R. P. M.
Air cooled:								
1 $\frac{3}{4}$	350	3 $\frac{3}{4}$	5	18	1 $\frac{3}{8}$	40	6 x 4	450
Hopper cooled:								
1 $\frac{3}{4}$	350	3 $\frac{3}{4}$	5	18	1 $\frac{3}{8}$	40	6 x 4	450
2 $\frac{1}{4}$	400	4	5 $\frac{1}{2}$	20	1 $\frac{3}{8}$	55	6 x 4	450
3 $\frac{1}{2}$	575	4 $\frac{1}{2}$	6	24	1 $\frac{3}{8}$	85	10 x 6	425
4 $\frac{1}{2}$	900	4 $\frac{3}{4}$	8	27	1 $\frac{3}{4}$	175	12 x 6	375
6	1,700	6	10	40	2 $\frac{1}{4}$	250	18 x 8	300
9	2,100	6 $\frac{3}{4}$	10	42	2 $\frac{1}{2}$	275	18 x 8	275
12	3,000	8	13	48	2 $\frac{3}{4}$	500	24 x 8	250



UNITED'S SUPERIOR CONSTRUCTION.

"Fuel saver" carburetor—simple and efficient.

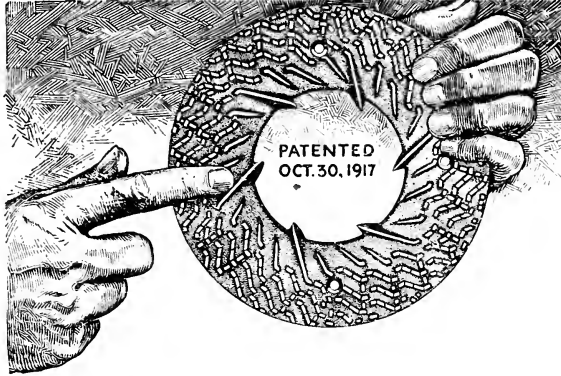
Four one-piece, non-leak, gas-tight piston rings.

Starts easy regardless of weather conditions.

Price on application.

Prices subject to change without notice. (See note on page 2.)

Over a
Thousand
Cutting
Edges.



A
Million
Cuts
a Minute.

In All the World No Grinding Plate Like the

3 1-2 inch **LETZ** Loga-Type.
America's Leading Feed Mill

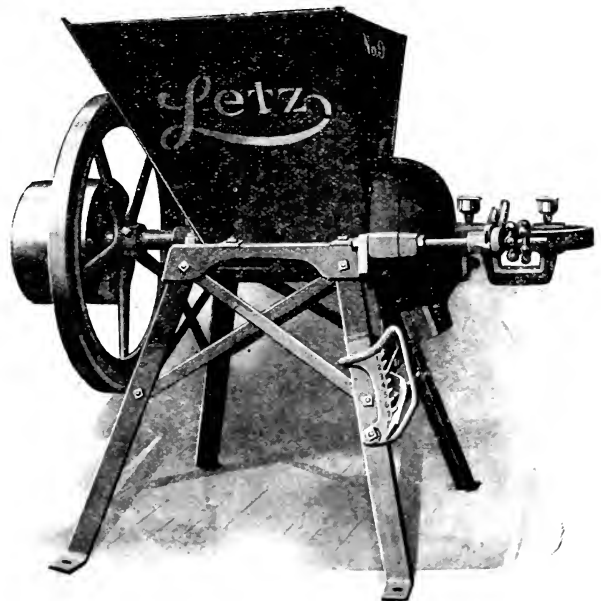
11 SIZES.

22 STYLES.

1-2 to 40 HORSE POWER.

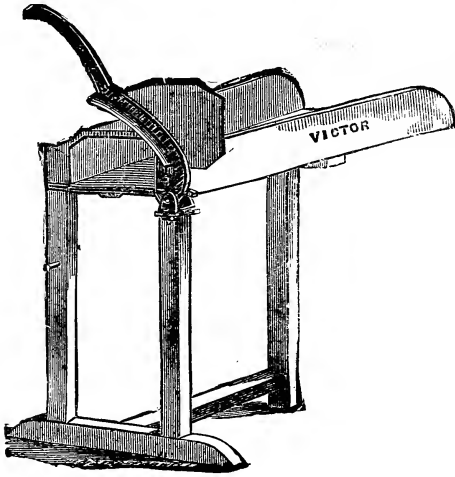
A mill for every grinding requirement and every size of engine. All Letz Grinders equipped with the famous Letz Patented Self-sharpening Grinding Plates. Each set guaranteed to grind from 2,000 to 3,000 bushels of grain.

**Price and catalog
on
application.**



Prices subject to change without notice. (See note on page 2.)

Victor Feed Cutter.



This iron handle lever cutter is so simple and easy to work as to commend it to everybody who has but a moderate amount of stock to feed. The knife is easy to adjust, grind and keep in repair.

Price, \$4.00 to \$7.00.

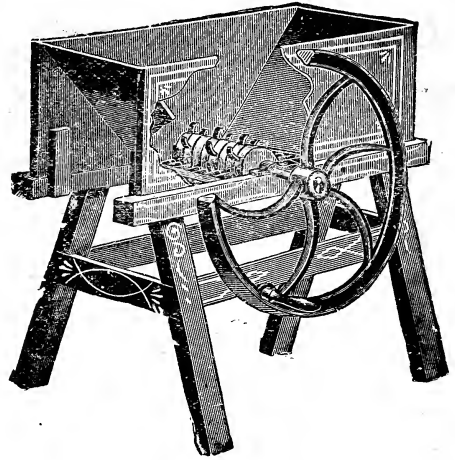
Rubber Belting.



Made from the highest grade material. Belting that will give you the maximum service under all operating conditions.

Price on application.

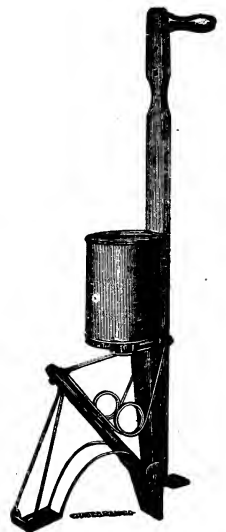
Champion Root Cutter.



This well known root or vegetable cutter has been on the market for many years, and it is too well known to need further description. It is well made of good material.

ACME ROTARY AUTOMATIC CORN PLANTER.

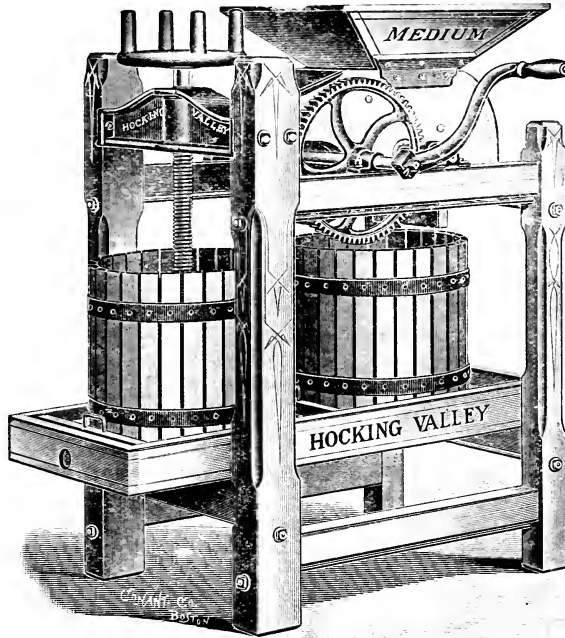
Used in one hand, like a walking stick. Disk is set for correct number of kernels by loosening thumb nut, moving star till pockets are of right size, then tightening thumb nut again. Seed corn should be graded by shelling off butts and tips. Plunge planter into ground, rock forward to trip seed, and withdraw. Double coil spring automatically rotates disk and closes jaws, thus filling same for next hill.



Price on application.

Prices subject to change without notice. (See note on page 2.)

HOCKING VALLEY CIDER MILLS.



THE DEVICE
FOR GRINDING
THE FRUIT
IS THE SAME
AS THAT USED
ON THE LARGE
HYDRAULIC
PRESSES.

THERE ARE
NO CAST IRON
ROLLERS
TO RUST AND
TO GIVE COLOR
AND TASTE
TO THE CIDER.

In the **Hocking Valley Cider Mills** we adapt the principle of the large hydraulic presses to a hand mill. The grinding device consists of a hard wood cylinder, revolving rapidly, with serrated steel knives running lengthwise, which break down the juice cells and make a pomace that yields under the press every particle of juice in the fruit. A quart of water will clean it after using. An important feature of the mills is the absence of metal of any kind to rust or impair the quality of the cider. We guarantee them to be entirely satisfactory in every respect, in execution, ease of operation, capacity, in durability and finish.

They are made in the three following sizes:

Junior, with tubs 12 inches high, 10 1-2 inches inside.

Capacity, 25 to 35 bushels per day.

Medium, with tubs 13 1-2 inches high, 12 1-2 inches inside.

Capacity, 30 to 40 bushels per day.

Senior, with tubs 15 inches high, 15 1-2 inches inside.

Capacity, 50 to 60 bushels per day.

Price on application.

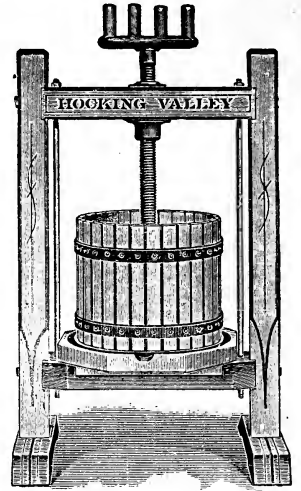
Prices subject to change without notice. (See note on page 2.)

HOCKING VALLEY FRUIT PRESS.

The Hocking Valley Fruit Press here represented is constructed of strictly high grade hard wood lumber, is thoroughly well made and handsomely finished. While we are in position to furnish it in several sizes, from the smallest to the largest, we give below the three sizes most in demand.

No. 1.

This has a 1-inch screw, and the crate or tub is $10\frac{1}{2}$ inches high and $8\frac{1}{2}$ inches in diameter. Its capacity, of course, is limited, but evidently sufficient to meet the wants of a good many, as we have a generous trade on it.



No. 2.

This size has a $1\frac{1}{4}$ -inch screw, and the crate or tub is 12 inches high and $10\frac{1}{2}$ inches in diameter. This is the size preferred for general family use and most in demand.

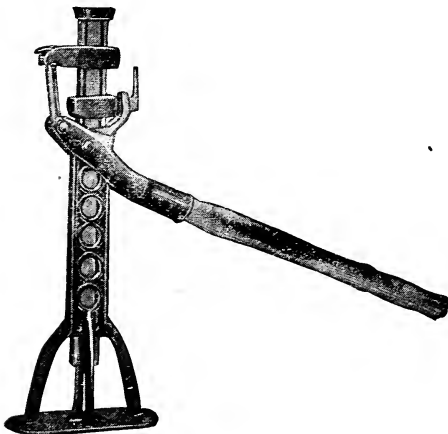
No. 3.

This size has a $1\frac{1}{2}$ -inch screw, and the crate or tub is $13\frac{1}{2}$ inches high and $12\frac{1}{2}$ inches in diameter. It is used where greater capacity is wanted.

These presses have solid hoops.

Price on application.

EUREKA WAGON JACK.



Light in weight but strong in lifting capacity.
Small in size but will easily raise a loaded wagon.

Suitable for raising many machines or objects.
It has double acting dogs ; what one raises the other holds.

Raises any height desired to 27 inches.

It is 16 inches in height when lowered.

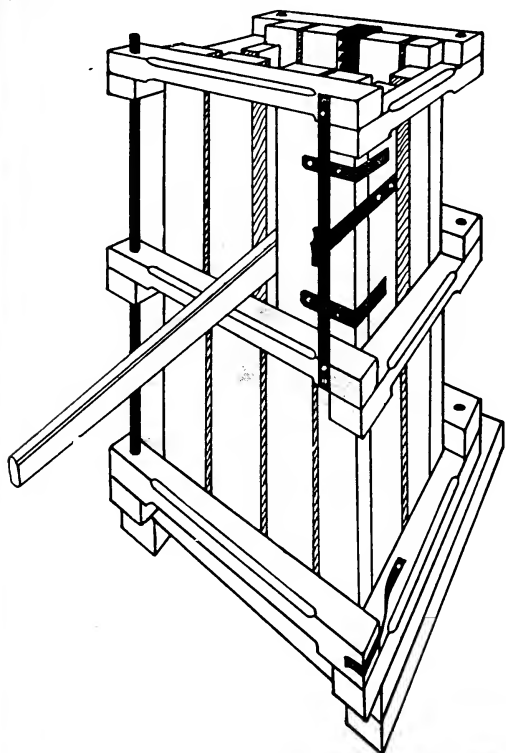
It is lowered by the same handle that raises.

It is constructed of steel and malleable iron.

There is not a bolt, spring or rivet used in its construction.

Price, 75 cents.

Prices subject to change without notice. (See note on page 2.)



PAPER PRESS.

TAKES CARE OF WASTE AND TURNS IT INTO MONEY.

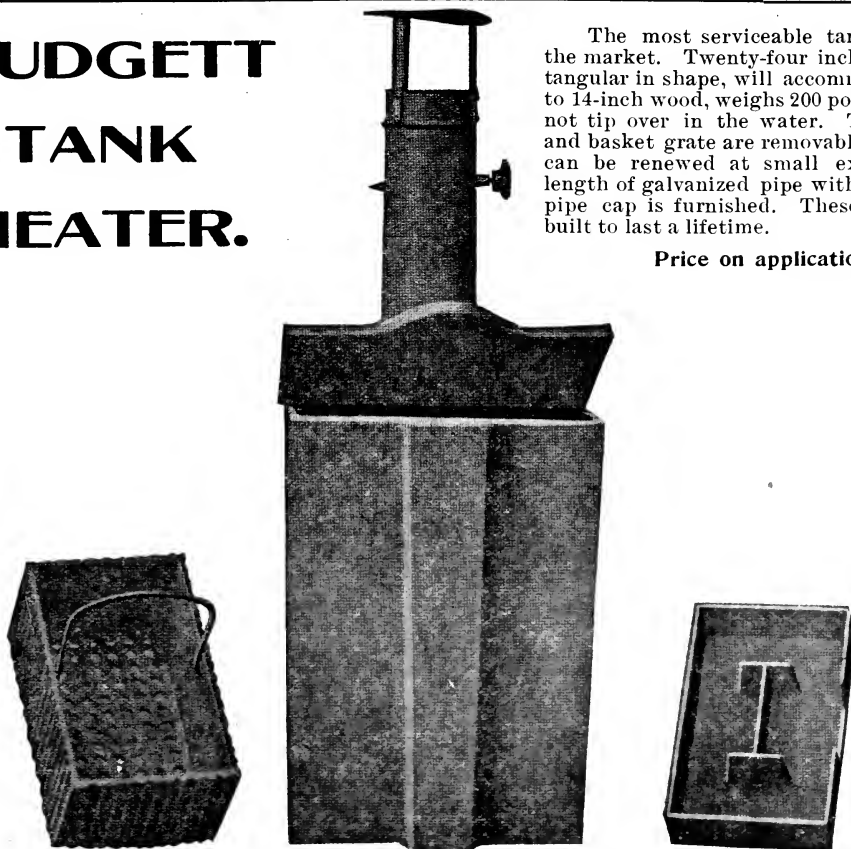
An efficient, quick working, convenient and low priced press for baling waste paper.

Price on application.

MUDGETT TANK HEATER.

The most serviceable tank heater on the market. Twenty-four inches high, rectangular in shape, will accommodate 12-in. to 14-inch wood, weighs 200 pounds and will not tip over in the water. The ash pan and basket grate are removable and grates can be renewed at small expense. One length of galvanized pipe with damper and pipe cap is furnished. These heaters are built to last a lifetime.

Price on application.

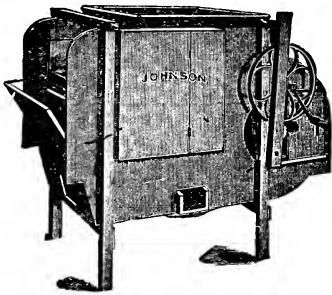
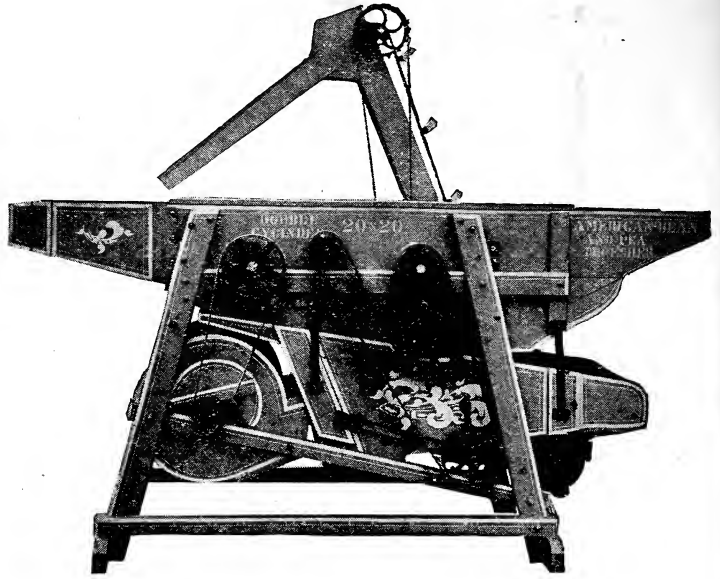


Prices subject to change without notice. (See note on page 2.)

No. 14.

AMERICAN**Double Cylinder
BEAN and PEA THRESHER.****Strong, Rugged, Efficient.****EVERY BUYER A SATISFIED CUSTOMER.**

This machine will thresh all varieties of beans (or peas) directly from the rankest growing vines, without splitting the seed. It takes **all the seed** from the vines and pods in a clean, marketable condition, and shreds the vines, making them valuable for fodder.

Price on application.**JOHNSON FAN MILL.**

The fan mill is indispensable to a well-regulated grain barn. This mill runs the sound, clean grain to one side of the mill, while the sand and small seeds pass out at the other, and the heavy chaff and heads are caught in a receptacle behind the machine. It will not only clean grain, but also grass seed in the best manner.

Price on application.**LITTLE GIANT
CORN SHELLER.****One Hole, Right Hand Sheller.**

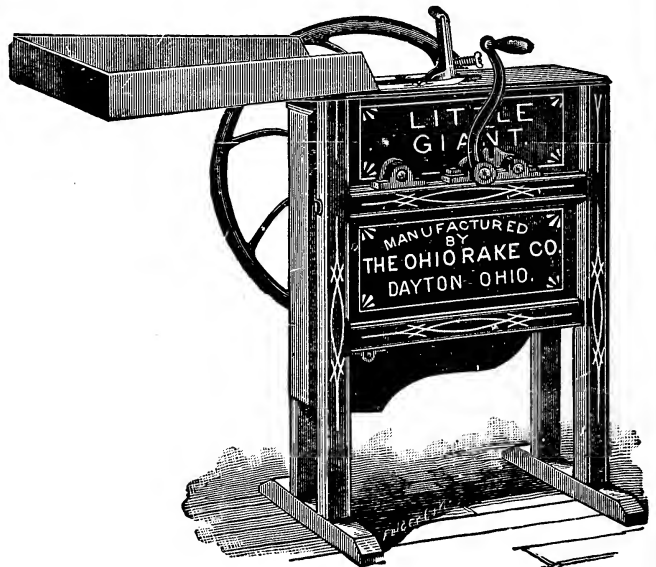
The frame is hard wood, mortised and pinned together.

Gears all inside.

Improved adjustable hopper, and is easily adapted to large or small corn.

Separates the corn and cobs, and with fan will clean for market or grinding.

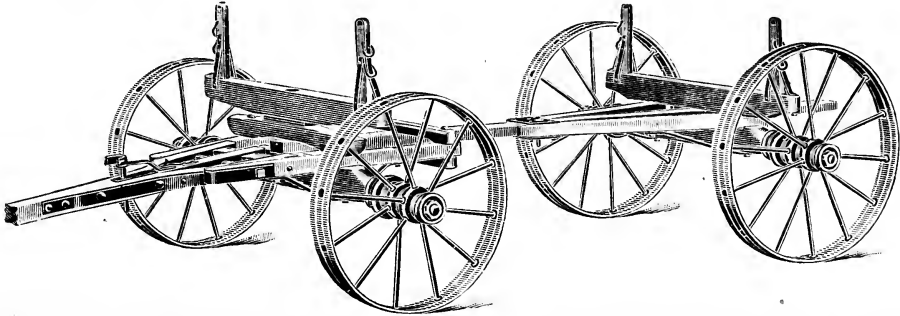
Shipped less table.

Price on application.

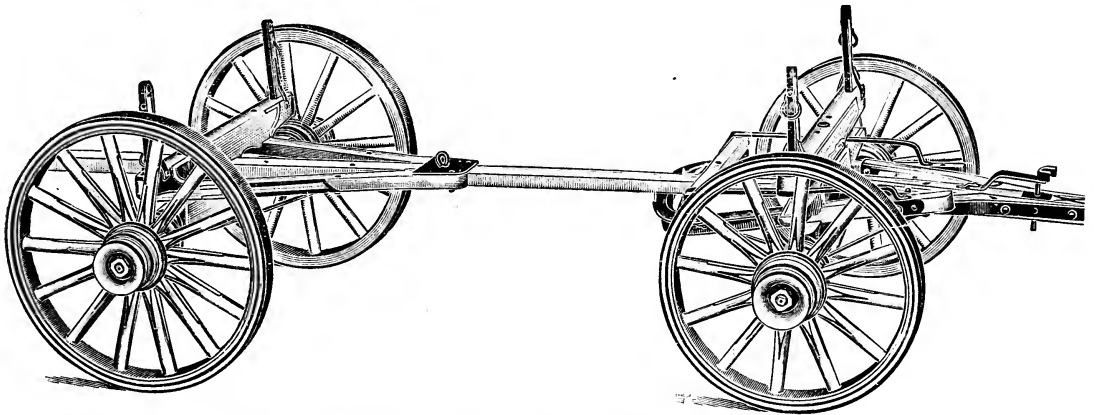
Prices subject to change without notice. (See note on page 2.)

FARM TRUCKS.

We emphatically recommend these trucks as adapted for all kinds of farm work, being exceptionally well made, and so constructed as to carry any style farm wagon box. The frames are solidly put together, and are of especial value in hauling **heavy loads**, being built with that end in view. Are equipped with either steel wheels or heavy wood wheels.

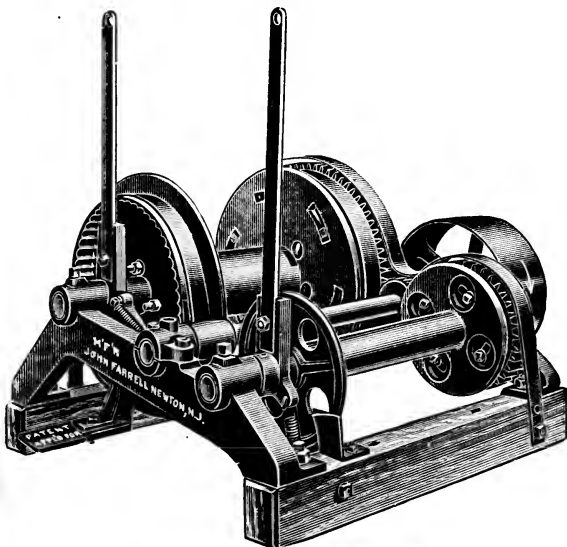


NO. 15. STEEL WHEEL TRUCK, WITH 3 1-4 x 10 INCH SKEIN, 28 AND 32 INCH STEEL WHEELS, AND 4 x 3-8 INCH TIRES.



CRESCENT TRUCK, WITH 3 1-4 x 9 INCH SKEIN, 30 AND 36 INCH WOOD WHEELS, AND 3 x 3-8 INCH TIRES.

Write for quotations.



STYLE B HOIST. LATEST MODEL.

THE FARRELL GEARED HOIST.

This machine is especially designed to save time and labor in unloading hay, hauling ice, etc. This hoist saves one man and team, and from one-third to one-half the time in unloading hay. The man on the load operates it by a rope attached to the operating levers. The load is under perfect control at all times, and may be held, raised or lowered at will. New patented ratchet device holds the load at any point without attention. The machine is equipped with powerful band brake. Can be run by a 4 horse power gasoline engine in unloading hay. Weight, 325 pounds. Other styles designed for special purposes also manufactured.

Price on application.

Prices subject to change without notice. (See note on page 2.)

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